XR-3753/C353

SERVICE MANUAL

East European Model

Photo: XR-3753

For RM-X2S (Remote Commander), please refer to RM-X2S/X3S Service Manual (9-960-039-□□) previously issued.

Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MG-25A-136

SPECIFICATIONS

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.08 % (WRMS)
Frequency response	30 – 20,000 Hz
Signal-to-noise ratio	58 dB

Tuner section

FM

Turning range	65.0 – 74.0 MHz (at 30 kHz step) 87.5 – 108.0 MHz (at 50 kHz step)
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	0.5 % (stereo), 0.3 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	2 dB

MW/LW

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 281 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.71 MHz/450 kHz
Sensitivity	MW: 30 µV LW: 50 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	35 W × 4 (at 4 ohms)

General

Outputs	Power aerial control lead Power amplifier control lead (XR-C353 only) Telephone mute control lead (XR-C353 only) Line out (XR-C353 only)
Tone controls	Bass ± 8 dB at 100 Hz Treble ± 8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 188 × 58 × 181 mm (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 164 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Rotary commander RM-X2S

Design and specifications are subject to change without notice.

FM/MW/LW CASSETTE CAR STEREO

MICROFILM

SONY®

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SERVICING NOTES

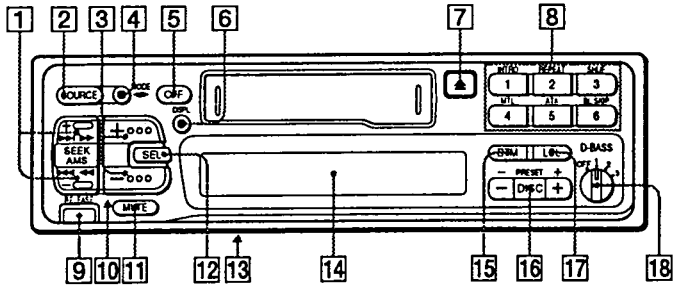
Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering .

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Location of controls



EN

Refer to the pages for further details.

1 SEEK/AMS button 5, 6, 7, 8, 10, 11

2 SOURCE button (TAPE/TUNER/CD*/MD*) 5, 7, 10

3 ⊕⊖ (volume/bass/treble/balance/fader control) button 5, 9

4 MODE (◄I►) button
During tuner reception:
BAND select 7

During tape playback:
Transport direction change 5

During CD*/MD* playback:
CD/MD Changer select 10

5 OFF button 4, 5

6 DSPL (display mode change/time set) button 5, 6, 8, 10

7 ⏏ (eject) button 5

8 During radio reception:
Preset number buttons 7

During tape/CD*/MD* playback:
① INTRO button 6, 11
② REPEAT button 6, 11
③ SHUF (Shuffle) button* 11
④ MTL (Metal) button 6
⑤ ATA (Automatic Tuner Activation) button 6
⑥ BLSKIP (Blank Skip) button 6

9 RELEASE (front panel release) button 4, 13

10 Reset button (located on the front side of the unit hidden by the front panel)
Press this button when you use this unit for the first time, when you have changed the car battery, or when the buttons of this unit do not function properly.

11 MUTE button 9

12 SEL (control mode select) button 5, 9, 10

13 POWER SELECT switch (located on the bottom of the unit)
See "POWER SELECT Switch" in the Installation/Connections manual.

14 Display window

15 BTM (Best tuning memory) button 7

16 PRESET/DISC button* 7, 11
During tuner reception:
Preset station select 7

During CD/MD playback:
Disc select 11

17 LCL button 8

18 D-BASS control 9

* *XR-C353 only*

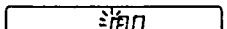
The illustration of the front panel in the manual is of the XR-C353.

Setting the clock

The clock has a 24-hour digital indication.
For example, setting it to 10:08

1 Press (OFF) or (DSPL) during operation.

2 Press (DSPL) for two seconds.



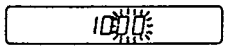
The hour digit flashes.

❶ Set the hour digits.

To go forward

To go backward

❷ Press (SEL) momentarily.



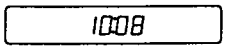
The minutes digits flashes.

❸ Set the minute digits.

To go forward

To go backward

3 Press (DSPL) momentarily.



The clock starts.

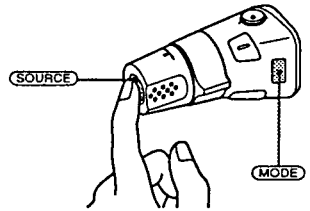
Note
If the POWER SELECT switch on the bottom of the unit is set to the ❸ position, the clock cannot be set unless the power is turned on. Set the clock after you have turned on the radio.

Other Functions

Using the rotary remote

The rotary remote works by pressing buttons and/or rotating controls.
You can control the optional CD and MD changer by the rotary remote.

By pressing buttons (the SOURCE and the MODE buttons)



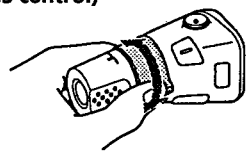
Every time you press (SOURCE), the source changes as follows:

TAPE → TUNER → CD/MD (XR-C353 only)

Pressing (MODE) changes the operation in the following ways:
- *the tape transport direction.*
- *the band, FM1 → FM2 → FM3 → MW → LW.*
- *the CD/MD changer. (XR-C353 only)*

Tip
You can turn on this unit by pressing (SOURCE) on the rotary remote.

By rotating the control (the SEEK/AMS control)

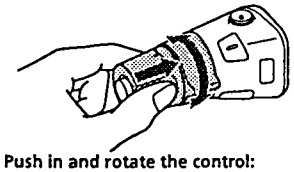


Rotate the control momentarily and release it to:
- Locate the beginnings of the tracks on the tape. Rotate and hold the control, and release it to fast-wind the tape. To playback, rotate and hold the control again, and release it.
- Locate a specific track on a disc. Rotate and hold the control until you locate the specific point in a track, then release it to start playback. (XR-C353 only)
- Tune in the stations automatically. Rotate and hold the control to tune in the specific station.

SECTION 1
GENERAL

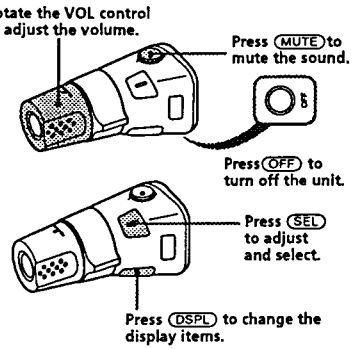
This section is extracted from instruction manual.

By rotating the control while pushing in (the PRESET/DISC control)



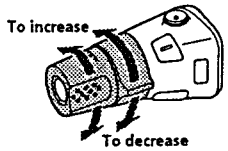
Push in and rotate the control:
- Receive the stations memorised on the preset button.
- Change the disc. (XR-C353 only)

Other operations

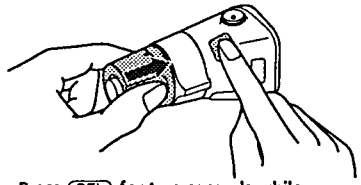

Rotate the VOL control to adjust the volume.
Press (MUTE) to mute the sound.
Press (OFF) to turn off the unit.
Press (SEL) to adjust and select.
Press (DSPL) to change the display items.

Changing the operative direction

The operative direction of controls is factory preset as in the illustration below.



If you need to mount the rotary remote on the right side of the steering column, you can reverse the controls' operative direction.



Press (SEL) for two seconds while pushing in the VOL control.

Adjusting the sound characteristics

1 Select the item you want to adjust by pressing (SEL) repeatedly.
VOL (volume) → BAS (bass) → TRE (treble) → BAL (balance) → FAD (fader)

2 Adjust the selected item by pressing either ⊕ or ⊖.

Adjust within three seconds after selecting. (After three seconds the button will again serve as the volume control button.)

Muting the sound

Press (MUTE).
The "MUTE" indication flashes.

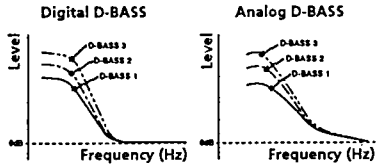
To restore the previous volume level, press again.

Tip
The unit decreases the volume automatically when a telephone call comes in (Telephone-mute function) (XR-C353 only).

Changing the sound and beep tone

Boosting the bass sound — D-Bass

You can enjoy clear and powerful bass sound. The D-bass function boosts the low frequency singal with a sharper curve than conventional bass boost.
You can hear the bass line more clearly even if the vocal sound is the same volume. You can emphasize and adjust the bass sound easily with the D-bass control. This effect is similar to the one you get when you use an optional subwoofer system.
Moreover, the Digital D-bass* function creates even sharper and more powerful bass sound than Analog D-bass.



Adjusting the bass curve

Turn the D-BASS control to adjust the bass level (1, 2 or 3).
"D-BASS"* appears in the display.

To cancel, turn the control to the OFF position.

** If an optional CD changer has the Digital D-BASS function, "DIGITAL D-BASS" appears on the display during CD playback (XR-C353 only).*

Muting the beep tone

Press (6) while pressing (SEL).
To obtain the beep tone again, press these buttons once more.

Note
If you connect an optional power amplifier and do not use the built-in amplifier, the beep tone will be disabled (XR-C353 only).

continue to next page →

Installation

Precautions

- Do not tamper with the four holes on the upper surface of the unit. They are used for tuner adjustments to be made only by service technicians.
- Choose the mounting location carefully so the unit does not interfere with normal driving operations.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 20°.

How to detach and attach the front panel

Before installing the unit, detach the front panel.

To detach

Press (RELEASE) to open up the front panel, then put it out.

To attach

Align parts Ⓐ and Ⓑ, and push the front panel in until it clicks.

Montaż

Zasady bezpieczeństwa

- Nie należy manipulować w czterech otworach znajdujących się na górnej części obudowy radia. Służą one jedynie do strojenia radia przez fachowców (w punkcie serwisowym).
- Miejsce do wmontowania radia należy wybrać z namysłem. Sprzęt nie może przeszkadzać kierowcy podczas jazdy.
- Nie należy umieszczać sprzętu w miejscach narażonych na działanie wysokich temperatur, jak na przykład w wyniku bezpośredniego nasłonecznienia lub nawiewu gorącego powietrza z ogrzewania samochodu, lub w miejscach silnie zakurzonych, silnie zabrudzonych lub narażonych na silne wstrząsy.
- Dla zapewnienia bezpiecznego i prawidłowego montażu należy korzystać jedynie z załączonych części montażowych.

Wymierzenie kąta montażowego

Kąt montażowy powinien wynosić mniej niż 20°.

Zdejmowanie i zakładanie przedniej ścianki

Przed zamontowaniem sprzętu proszę zdjąć przednią ściankę.

Zdejmowanie

W tym celu należy najpierw nacisnąć (RELEASE) dla odblokowania przedniej ścianki, a następnie wyciągnąć ją pociągając do siebie.

Zakładanie

Połączyć części Ⓐ przedniej ścianki z częściami Ⓑ radia i przycisnąć ją aż do zaskoczenia.

Инсталиране

Мерки за безопасност

- Не пипайте вътре в четирите отвора, разположени на горната страна на апарата. Те са за настройка на радиоприемника, която се извършва само от сервизни техници.
- Изберете внимателно мястото за инсталиране, така че апаратът да не пречи на водача по време на шофиране.
- Избягвайте да инсталирате апарата там, където той би могъл да е подложен на високи температури като места с директна слънчева светлина или горещ въздух от парното, или където ще е подложен на прах, замърсяване или силни вибрации.
- Използувайте само доставените детайли за монтаж за сигурно и безопасно инсталиране.

Настройка на ъгъла за монтаж

Нагласете ъгъла на монтаж да бъде по-малък от 20 градуса.

Как да сваляме и да поставяме предното табло

Преди инсталиране на апарата свалете предното му табло за управление.

Сваляне

Натиснете (RELEASE), за да освободите предното табло за управление на апарата и след това издърпайте таблото към себе си.

Поставяне

Допрете една до друга частите означени с Ⓐ и Ⓑ и леко натиснете предното табло за управление докато чуете прищракване.

Üzembehelyezés

Biztonsági előírások

- Kérjük ne nyúljon bele a készülék tetején található négy lyukba, ezek ugyanis a rádió behangolására szolgálnak, melyet kizárólag a vevőszolgálat műszaki szakemberei végezhetnek.
- Kérjük gondosan válassza ki a készülék helyét, úgy, hogy az ne akadályozza a vezetőt vezetés közben.
- Kérjük olyan helyen helyezze el a készüléket, ahol nincs kitéve magas hőmérsékletnek, tehát közvetlen napfénynek vagy a fűtőegységből kiáramló forró levegőnek és ahol nincs kitéve pornak, ill. erős rázkódásnak.
- A biztonságos üzemeltetés érdekében kérjük, hogy csak a készülékkel szállított szerelő-készletet használja.

A beszerelési szög beállítása

A készüléket max. 20°-os döntéssel szerelje be.

A kezelőlap kivétele és behelyezése

A készülék beszerelése előtt vegye le róla a kezelőlapot.

A kezelőlap levétele

Oldja ki a kezelőlapot a (RELEASE) megnyomásával, majd vegye ki a kezelőlapot.

A kezelőlap visszatétele

Igazítsa össze az Ⓐ-val és Ⓑ-vel jelölt részeket, majd nyomja a kezelőlapot a készülékhez, amíg be nem pattan.

Установка

Меры предосторожности

- Не манипулируйте с четырьмя отверстиями на верхней поверхности прибора. Они предназначены для подстроек тюнера, которые должны производиться только специалистами.
- Выбирайте место установки таким образом, чтобы прибор не препятствовал водителю во время управления автомобилем.
- Предотвращайте установку прибора там, где он может быть подвержен высоким температурам, например, от прямого солнечного света или горячего воздуха из печки, или там, где возможны воздействия пыли, влаги или сильной вибрации.
- Для безопасной установки используйте только входящее в комплект монтажное оборудование.

Подстройка угла монтажа

Угол монтажа выберите меньшим, чем 20°.

Как снимать и устанавливать переднюю панель

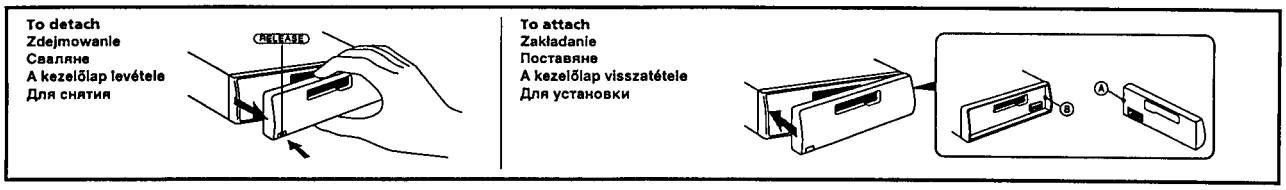
Перед установкой прибора снимите переднюю панель.

Для снятия

Отсоедините переднюю панель нажатием (RELEASE) и снимите её, потянув на себя.

Для установки

Совместите друг с другом части Ⓐ и Ⓑ, а затем нажмите на переднюю панель до щелчка.



Mounting example

Installation in the dashboard

Przykład montażu

Montaż na desce rozdzielczej

Пример за монтиране

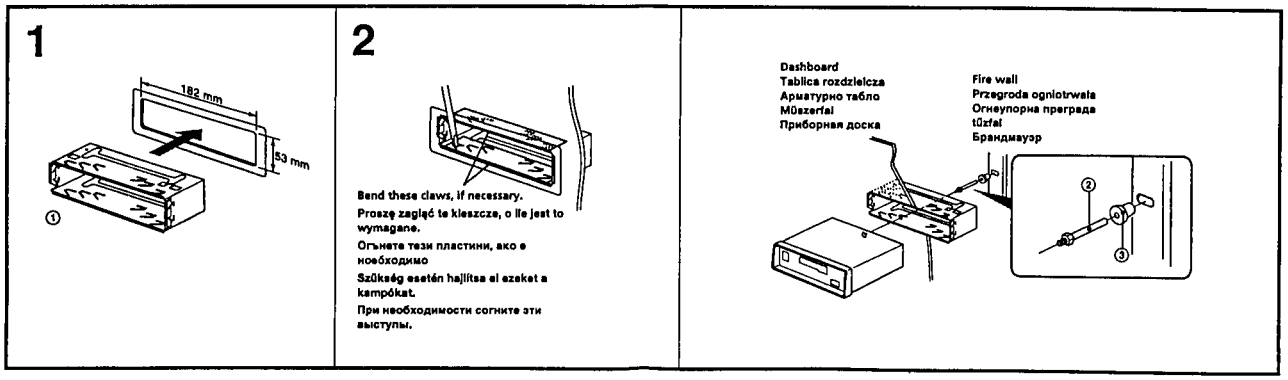
Инсталиране в арматурното табло

Szerelési példa

A készülék beszerelése a műszerfalba

Пример монтажа

Установка в приборной доске



Caution

Cautionary notice for handling the bracket ①.
Handle the bracket carefully to avoid injuring your fingers.

Ostrzeżenie

Uwaga ostrzegawcza dotycząca posługiwania się wspornikiem ①. Wspornikiem należy posługiwać się z dużą ostrożnością aby uniknąć ewentualnego zranienia rąk.

Предупреждение

Предупредителна забележка относно работа с конзолата ①. Работете с конзолата внимателно за да избегнете нараняване на пръстите.

Figyelem!

Elővigyázatossági megjegyzés az ①-es kengyel kezeléséhez
A kengyelt óvatosan kezelje, és vigyázzon arra, hogy meg ne sértse az ujját.

Предостережение

Предупреждающее замечание по обращению со скобой ①.
Осторожно обращайтесь со скобой, чтобы не поранить пальцы.

Connections

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the yellow and red power input leads only after all other leads have been connected.
- Be sure to connect the red power input lead to the positive 12 V power terminal which is energized when the ignition key is in the accessory position.
- Run all earth wires to a common earth point.
- Connect the yellow cord to a free car circuit rated higher than the unit's fuse rating. If you connect this unit in series with other stereo components, the car circuit they are connected to must be rated higher than the sum of the individual component's fuse rating. If there are no car circuits rated as high as the unit's fuse rating, connect the unit directly to the battery. If no car circuits are available for connecting this unit, connect the unit to a car circuit rated higher than the unit's fuse rating in such a way that if the unit blows its fuse, no other circuits will be cut off.

Wykonanie podłączeń

Zasady bezpieczeństwa

- Niniejszy sprzęt jest przeznaczony wyłącznie do pracy przy zasilaniu prądem stałym o 12 V i ujemnym uziemieniu.
- Proszę przed wykonaniem podłączeń odłączyć uziemienie akumulatora, aby zapobiec wystąpieniu zwarcia.
- Żółty i czerwony wejściowy przewód zasilający proszę podłączyć dopiero po podłączeniu wszystkich innych przewodów.
- Czerwony przewód zasilający należy koniecznie podłączyć do końcówki +12 V, która jest zasilana zawsze po przekręceniu kluczyka w stacyjce do położenia, w którym włącza się zasilanie przyrządów.
- Wszystkie przewody uziemiające należy poprowadzić do wspólnego miejsca uziemienia.
- Proszę podłączyć żółty przewód do wolnego obwodu pojazdu o wyższej niż znamionowa moc nominalna bezpiecznika bazowego sprzętu. Jeżeli urządzenie zostanie podłączone w serii do innych komponentów zestawu stereo, proszę się upewnić, że samochodowy obwód mocy posiada wyższą od sumy znamionowej mocy nominalnej bezpieczników poszczególnych komponentów zestawu. Jeżeli nie ma odpowiedniego wolnego obwodu o mocy znamionowej wyższej niż nominalna moc znamionowa bezpiecznika sprzętu, proszę sprzęt podłączyć bezpośrednio do akumulatora. W przypadku gdy w samochodzie nie ma wolnych obwodów o wyższej od bezpiecznika sprzętu nominalnej mocy znamionowej, proszę sprzęt podłączyć w taki sposób, aby ewentualne przepalenie bezpiecznika sprzętu, nie spowodowało odcięcia pozostałych obwodów mocy w samochodzie.

Свързване

Предупреждение

- Този апарат е конструиран за работа само с прав ток 12 V и заземяване на отрицателната клема.
- Преди да направите свързването откачете заземяващата клема на акумулатора на автомобила, за да избегнете къси съединения.
- Свържете жълтия и червен захранващи проводници само след като сте свързали всички останали проводници.
- Убедете се, че със сигурност свързвате червения захранващ проводник към положителната клема с 12 V, към която се подава ток при положение на ключа за запалване за спомагателни уреди.
- Подведете всички заземяващи проводници към обща заземяваща точка.
- Свържете жълтия проводник към свободна електрическа верига на автомобила с параметри, надвишаващи тези на ел. предпазител на апарата. В случай, че свържете този апарат последователно с друго стерео оборудване, параметрите на електрическата верига към която те са свързани трябва да надхвърлят сумата от параметрите на ел. предпазители на отделните компоненти. В случай, че автомобила няма ел. верига с параметри, които са по-големи от тези на ел. предпазител на апарата, свържете апарата директно към акумулаторната батерия. В случай, че няма свободни ел. вериги на автомобила, свържете апарата към ел. верига с параметри по-големи от тези на ел. предпазител по такъв начин, че ако изгори ел. предпазител на апарата да не бъде прекъсната нито една друга ел. верига.

Csatlakozások

Figyelem

- Ez a készülék csak 12 V-os negatív földelésű, egyenáramú akkumulátorról üzemeltethető.
- Egy esetleges rövidzárlat elkerülése érdekében vegye le az autó akkumulátorának csatlakozóját a készülék csatlakoztatása előtt.
- A sárga és a piros színű tápvezetéket csak az összes többi vezeték bekötése után csatlakoztassa.
- A piros vezetéket ahhoz a +12V-os csatlakozási ponthoz csatlakoztassa, mely áramot kap, ha az indítókulcs félig van elfordítva.
- Az összes földelővezetéket közös földelőponthoz csatlakoztassa.
- A sárga huzalt a gépjárművön olyan szabad áramkörre kösse be, melynek névleges terhelhetősége magasabb, mint amire a készülék biztosítva van. Ha ezt az egységet más sztereo készülékkel köti sorba, akkor annak az áramkörnek a terhelhetősége, melyre a készülékek rá vannak kötve, magasabb kell hogy legyen, mint az egyes készülékek biztosíték-áramainak összege. Ha a jármű nem rendelkezik olyan áramkörrel, melynek terhelhetősége eléri az egység biztosíték-áramát, akkor kösse az egységet közvetlenül az akkumulátorra. Ha nincs olyan szabad áramkör a gépjárművön, mely alkalmas lenne a készülék bekötésére, akkor a készüléket olyan áramkörre kösse be, mely olymódon rendelkezik magasabb terhelhetőséggel, mint amire a készülék biztosítva van, hogy ha a készülék kiolvja a biztosítékot, más áramkörök ezzel nem záródnak le.

Соединения

Предостережение

- Данный прибор сконструирован только для эксплуатации на минусе с постоянным напряжением 12 В.
- Перед подключением отсоедините заземляющую клемму автомобильного аккумулятора для предотвращения короткого замыкания.
- Желтый и красный сетевые провода подсоединяйте только после того, как все остальные провода подсоединены.
- Красный сетевой провод подключайте к положительной клемме 12 В, которая находится под напряжением, когда ключ зажигания в промежуточной позиции.
- Все заземляющие провода соедините с подходящей точкой на массе.
- Соедините желтый провод со свободным контуром на автомобиле, имеющим большую мощность, чем плавкий предохранитель прибора. Если Вы подключаете этот прибор вместе с другими стереокомпонентами, контуры автомобиля, к которым они подключены, должны иметь большую мощность, чем сумма мощностей плавких предохранителей отдельных компонентов. Если ни один из контуров автомобиля не имеет мощности плавкого предохранителя прибора, подключите прибор непосредственно к аккумулятору. Если на автомобиле для подключения прибора не осталось свободного контура, подключите прибор к любому контуру, имеющему большую мощность, чем плавкий предохранитель прибора таким образом, чтобы при сгорании предохранителя не были разомкнуты другие контуры.

If Your Car has No Accessory Position on the Ignition Key Switch

— POWER SELECT switch

The illumination on the front panel is factory set to be turned on even while the unit is in use played. However, this setting may cause some car battery wear If your car has no accessory position on the ignition key switch. To avoid this battery wear, set the POWER SELECT switch located on the bottom of the unit to the ⏻ position, then press the reset button. The illumination is reset to stay off while the unit is not in use.

Note
The caution alarm for the front panel is not activated when the POWER SELECT switch is set to the ⏻ position.

Jeżeli stacyjka samochodu nie jest wyposażona w pozycję przełączania na sprzęt dodatkowy, proszę nastawić włącznik oznaczony

— POWER SELECT (wybór źródła zasilania)

Wskaźnik świetlny na panelu jest fabrycznie ustawiony na włączenie nawet w przypadku kiedy sprzęt nie jest użytkowany. Zwraca się jednak uwagę na fakt, że nastawienie takie powoduje pewne zużycie akumulatora Jeżeli pojazd nie jest wyposażony w dodatkową pozycję na stacyjce. Celem uniknięcia dodatkowego zużycia akumulatora, proszę nastawić przełącznik POWER SELECT (wybór źródła zasilania), umieszczony pod spodem sprzętu, na pozycję oznaczoną ⏻, a następnie proszę nacisnąć przycisk zerowania (reset). W ten sposób zostaje wyłączony wskaźnik świetlny na czas kiedy sprzęt nie jest użytkowany.

Uwaga
Alarm ostrzegawczy panelu nie zostaje uaktywniony, jeżeli przełącznik POWER SELECT (wybór źródła zasilania) jest ustawiony w pozycji ⏻.

В случай, че Вашият автомобил няма положение за спомагателни уреди на ключа за запалване

— POWER SELECT превключвател

Осветлението на предното табло за управление е фабрично настроено да свети дори, когато апаратът не работи. Тази настройка, обаче може да доведе до известно изтощаване на акумулатора, ако Вашият автомобил няма положение за спомагателни уреди на ключа за запалване. За да избегнете изтощаване на акумулатора, поставете превключвателя POWER SELECT, който е разположен на долната страна на апарата в положение ⏻ и след това натиснете бутона за промяна на настройката. Сега вече осветлението е настроено да не свети, когато апаратът не работи.

Забележка
Предупредителният сигнал за предното табло за управление не се задейства, когато POWER SELECT превключвателят е поставен в положение ⏻.

На autójában nincs készenléti gyújtás (ACC) pozíció

— POWER SELECT kapcsoló

A kezelőlap megvilágítását gyárunkban úgy állítottuk be, hogy az akkor is bekapcsolódjon, ha Ön éppen nem használja készülékét. Ez terhelést jelenthet az autó akkumulátora számára, ha a készüléket olyan autóban használja, melynek nincs készenléti gyújtás (ACC) pozíciója. Ha el akarja kerülni az akkumulátor terhelését, úgy állítsa a készülék alján található POWER SELECT (tápfeszültség választó) kapcsolót a ⏻ állásba, majd nyomja meg a "reset" gombot. A kezelőlap megvilágítása így nem kapcsol be, ha Ön nem használja készülékét.

Tudnivaló
Ha a POWER SELECT kapcsoló ⏻ állásba van állítva, úgy nem működik a kezelőlap figyelmeztető funkciója.

Если на Вашем автомобиле нет промежуточной позиции на переключателе зажигания

— Переключатель POWER SELECT

Иллюминация на передней панели установлена на заводе таким образом, что она включена даже тогда, когда прибор не находится в рабочем состоянии. Однако, если Ваш автомобиль не снабжен промежуточной позицией ключа зажигания, эта установка может вызывать некоторую разрядку автомобильного аккумулятора. Для предотвращения этой разрядки установите расположенный на дне прибора переключатель POWER SELECT в позицию ⏻, затем нажмите клавишу переустановки. Теперь иллюминация будет выключена, если прибор не в рабочем состоянии.

Примечание
Сигнал тревоги для передней панели дезактивируется, если переключатель POWER SELECT установлен в позицию ⏻.

Change the position with a jeweler's screwdriver, etc.
Przestawienia przełącznika można dokonać przy pomocy śrubokrętu jubilerskiego itp.
Променете положението с помощта на фина отвертка или друг инструмент.
Állítsa be a helyes pozíciót egy mini csavarhúzó, vagy más hasonló eszköz segítségével.
Изменяйте позицию с помощью ювелирной отвертки и т.д.

Notes on the control leads
- *The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation) Function.*
- *A power antenna without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.*
- *Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.*

Uwagi na temat przewodów zasilania
- *Przewód zasilania anteny automatycznej (niebieski) dostarcza prąd stały +12 V DC po włączeniu radia lub po uruchomieniu funkcji ATA.*
- *W połączeniu z tym radiem nie można korzystać z automatycznej anteny nie posiadającej skrzynki przekaźnikowej.*

Zasilanie pamięci sprzętu
Jeżeli podłączyło się żółty wejściowy przewód zasilający, obwód pamięci będzie zawsze zasilany, nawet po wyłączeniu stacyjki.

Uwagi na temat podłączania głośników
- *Przed podłączeniem głośników należy wyłączyć sprzęt.*
- *Należy stosować głośniki o impedancji od 4 do 8 omów, posiadające odpowiednią obciążalność mocową, ponieważ w przeciwnym wypadku można uszkodzić głośniki.*
- *Nie należy podłączać przewodów układu głośników do podwozia pojazdu, ani też podłączać przyłączy prawego głośnika do przyłączy lewego głośnika.*
- *Nie należy podłączać głośników równolegle.*
- *Do gniazd sprzętu przeznaczonych dla podłączania głośników nie należy podłączać głośników aktywnych (z wbudowanymi wzmacniaczami), ponieważ może to prowadzić do ich uszkodzenia. Dlatego też należy podłączać wyłącznie głośniki pasywne do tych gniazd.*

Забележки по проводниците за управление
- *Проводникът за управление на автоантената антена (син) подава + 12 V прав ток, когато включите апарата, или ако активирате функцията ATA (Automatic Tuner Activation).*
- *Автоантена антена без релейна кутия не може да бъде използвана с този апарат.*

Свързване за поддържане на паметта
Когато е свързан жълтия захранващ проводник, към интегралната схема за паметта се подава винаги ток, дори когато ключът за запалване е в изключено положение.

Забележки по свързване на високоговорителите
- *Преди да свържете високоговорителите изключете апарата.*
- *Използвайте високоговорители само със съпротивление от 4 до 8 ома и с мощност, която отговаря на мощността на усилвателя. В противен случай може да повредите високоговорителите.*
- *Не свързвайте клемите на системата на високоговорителите към шасито на автомобила, както и не свързвайте една с друга клемите на дясния и на левия високоговорител.*
- *Не се опитвайте да свързвате високоговорителите успоредно.*
- *Въобще не свързвайте никакви активни високоговорители (с вградени усилватели) към клемите за високоговорители на апарата. Ако направите това ще повредите активните високоговорители. Поради това се уверете, че свързвате пасивни високоговорители към клемите на апарата.*

Tudnivalók a vezérlővezetékekről
- *A motoros antenna vezérlővezetéke (kék) +12 V egyenfeszültséget kap, ha bekapcsolja a készüléket vagy az ATA (automatikus rádió aktiválás) funkciót.*
- *Ha a készülékhez motoros antennát csatlakoztat, úgy kizárólag relécsoborral felszerelt motoros antennát használjon.*

Memória megtartás
Ha csatlakoztatja a sárga tápvezetéket, úgy folyamatosan feszültség alatt marad a memória áramkör, még akkor is, ha kikapcsolja a gyújtást.

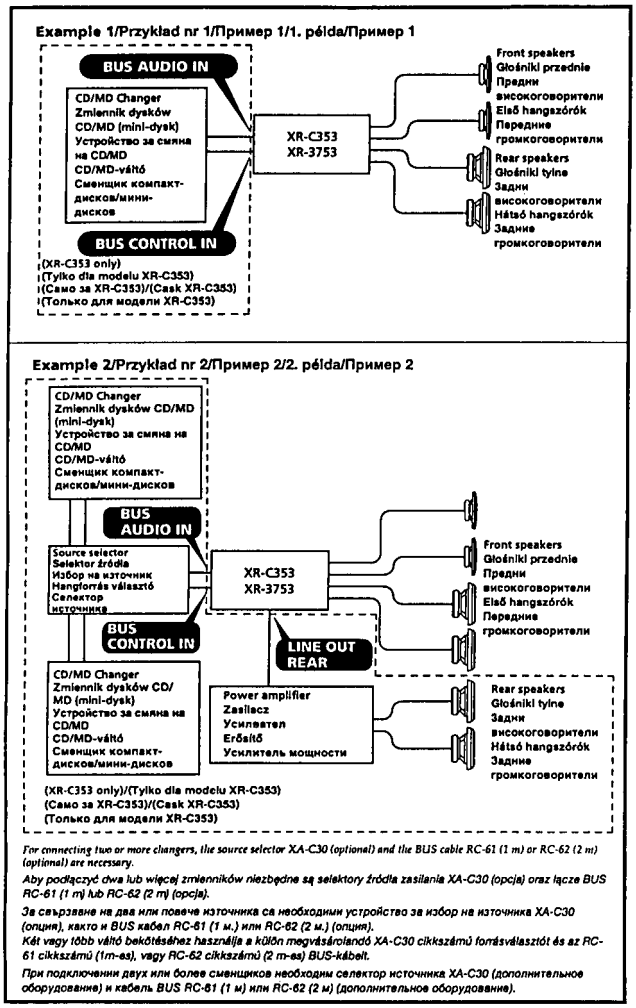
Tudnivalók a hangszórók csatlakoztatásáról
- *Kérjük kapcsolja ki a készüléket a hangszórók csatlakoztatása előtt.*
- *4-8 ohm impedanciájú, megfelelő teljesítményű hangszórókat használjon, ellenkező esetben ugyanis előfordulhat, hogy a hangszórók károsodnak.*
- *Ne csatlakoztasse a hangszórókat az autó fém szerkezetéhez és ne csatlakoztassa a jobb hangszórót a bal hangszóróhoz.*
- *A hangszórókat semmi esetre se kösse be párhuzamosan.*
- *Ne csatlakoztasson aktív (beépített erősítővel felszerelt) hangszórókat a készülékhez, ellenkező esetben ugyanis károsodhatnak az aktív hangszórók. A készülékhez csak passzív hangszórókat szabad csatlakoztatni.*

Примечания по управляющим проводам
- *Провод, управляющий питанием антенны (голубой) подает постоянное напряжение + 12 В, если Вы включили прибор или если Вы включили функцию ATA (Автоматическая Активация Тюнера).*
- *Электрическая антенна без коробки реле не может быть использована с данным прибором.*

Соединение поддержки памяти
Если желтый сетевой провод подключен, питание будет подаваться для поддержки памяти всегда, даже при выключенном зажигании.

Примечания по подключению громкоговорителей
- *Перед подключением громкоговорителей выключите прибор.*
- *Используйте громкоговорители с сопротивлением от 4 до 8 Ом и с адекватной мощностью. Иначе громкоговорители могут быть повреждены.*
- *Не подсоединяйте клеммы громкоговорителей на массу и не соединяйте клеммы правых громкоговорителей с клеммами левых.*
- *Не пытайтесь подключить громкоговорители параллельно.*
- *Не подключайте активные громкоговорители (со встроенным усилителем) к клеммам громкоговорителей на приборе. Это может повредить активные громкоговорители. Поэтому убедитесь, что подключаете пассивные громкоговорители к данным клеммам.*

Connection diagram
Schemat wykonania podłączeń
Схема на свързване
Bekötési rajz
Диаграмма соединений



For connecting two or more changers, the source selector XA-C30 (optional) and the BUS cable RC-61 (1 m) or RC-62 (2 m) (optional) are necessary.

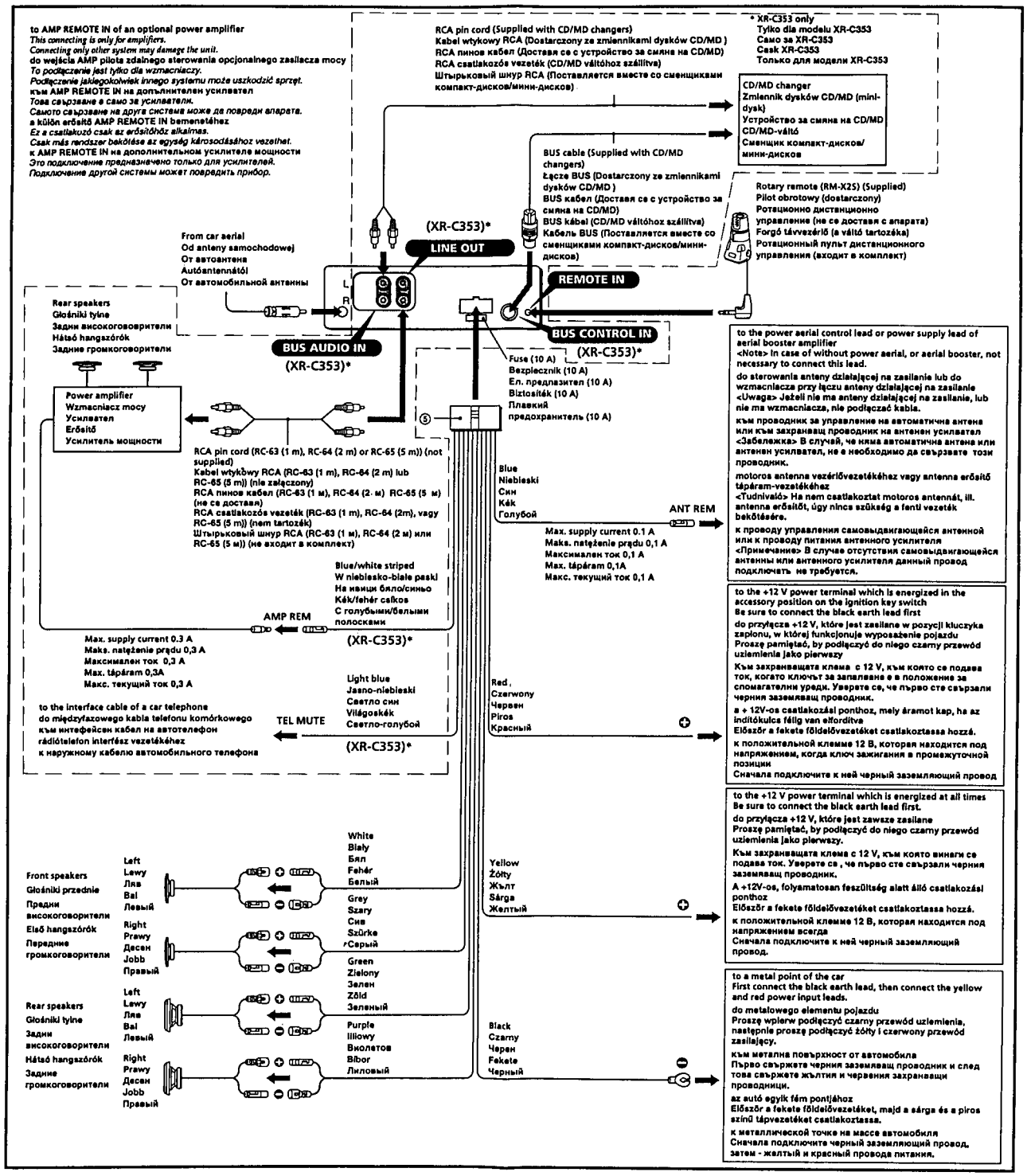
Aby podłączyć dwa lub więcej zmienników niezbędne są selektory źródła zasilania XA-C30 (opcja) oraz łącze BUS RC-61 (1 m) lub RC-62 (2 m) (opcja).

За свързване на два или повече източника са необходими устройство за избор на източника XA-C30 (опция), както и BUS кабел RC-61 (1 м.) или RC-62 (2 м.) (опция).

Két vagy több váltó bekötéséhez használja a külön megvásárolandó XA-C30 cikkszámú forrásválasztót és az RC-61 cikkszámú (1m-es), vagy RC-62 cikkszámú (2 m-es) BUS-kábelt.

При подключении двух или более сменщиков необходим селектор источника XA-C30 (дополнительное оборудование) и кабель BUS RC-61 (1 м) или RC-62 (2 м) (дополнительное оборудование).

Connection example **Przykład podłączenia** **Примери за свързвания** **Bekötési példák** **Соединения в примере**


to AMP REMOTE IN of an optional power amplifier
This connecting is only for amplifiers.
Connecting only other system may damage the unit.
do wejścia AMP pilota zdalnego sterowania opcjonalnego zasilacza mocy
To podłączenie jest tylko dla wzmacniaczy.
Podłączenie jakiegokolwiek innego systemu może uszkodzić sprzęt.
към AMP REMOTE IN на допълнителен усилвател
Това свързване е само за усилватели.
Самото свързване на друга система може да повреди апарата.
a külön erősítő AMP REMOTE IN bemenetéhez
Ez a csatlakozó csak az erősítőhöz alkalmas.
Csak más rendszer bekötése az egység károsodásához vezethet.
к AMP REMOTE IN на дополнительном усилителе мощности
Это подключение предназначено только для усилителей.
Подключение другой системы может повредить прибор.
RCA pin cord (Supplied with CD/MD changers)
Kabel wtykowy RCA (Dostarczony ze zmiennikami dysków CD/MD)
RCA пинов кабел (Доставя се с устройство за смяна на CD/MD)
RCA csatlakozós vezeték (CD/MD váltóhoz szállítva)
Штырьковый шнур RCA (Поставляется вместе со сменщиками компакт-дисков/мини-дисков)
* XR-C353 only
Tylko dla modelu XR-C353
Само за XR-C353
Csak XR-C353
Только для модели XR-C353
CD/MD changer
Zmiennik dysków CD/MD (mini-dysk)
Устройство за смяна на CD/MD
CD/MD-váltó
Сменщик компакт-дисков/мини-дисков
BUS cable (Supplied with CD/MD changers)
Łącze BUS (Dostarczony ze zmiennikami dysków CD/MD)
BUS кабел (Доставя се с устройство за смяна на CD/MD)
BUS kábel (CD/MD váltóhoz szállítva)
Кабель BUS (Поставляется вместе со сменщиками компакт-дисков/мини-дисков)
Rotary remote (RM-X2S) (Supplied)
Pilot obrotowy (dostarczony)
Ротационно дистанционно управление (не се доставя с апарата)
Forgó távvezérlő (a váltó tartozéka)
Ротационный пульт дистанционного управления (входит в комплект)
From car aerial
Od anteny samochodowej
От автоантена
Autóantennától
От автомобильной антенны
(XR-C353)*
LINE OUT
REMOTE IN
BUS CONTROL IN
(XR-C353)*
BUS AUDIO IN
(XR-C353)*
Rear speakers
Głośniki tylne
Задни високоговорители
Hátsó hangszórók
Задние громкоговорители
Power amplifier
Wzmacniacz mocy
Усилвател
Erősítő
Усилитель мощности
Fuse (10 A)
Bezpiecznik (10 A)
Ел. предпазител (10 A)
Biztosíték (10 A)
Плавкий предохранитель (10 A)
to the power aerial control lead or power supply lead of aerial booster amplifier
<Note> In case of without power aerial, or aerial booster, not necessary to connect this lead.
do sterowania anteny działającej na zasilanie lub do wzmacniacza przy łączu anteny działającej na zasilanie
<Uwaga> Jeżeli nie ma anteny działającej na zasilanie, lub nie ma wzmacniacza, nie podłączać kabla.
към проводник за управление на автоматична антена или към захранващ проводник на антенен усилвател
<Забележка> В случай, че няма автоматична антена или антенен усилвател, не е необходимо да свързвате този проводник.
motoros antenna vezérlővezetékéhez vagy antenna erősítő tápáram-vezetékéhez
<Tudnivaló> Ha nem csatlakoztat motoros antennát, ill. antenna erősítőt, úgy nincs szükség a fentí vezeték bekötésére.
к проводу управления самовыдвигающейся антенной или к проводу питания антенного усилителя
<Примечание> В случае отсутствия самовыдвигающейся антенны или антенного усилителя данный провод подключать не требуется.
RCA pin cord (RC-63 (1 m), RC-64 (2 m) or RC-65 (5 m)) (not supplied)
Kabel wtykowy RCA (RC-63 (1 m), RC-64 (2 m) lub RC-65 (5 m)) (nie załączony)
RCA пинов кабел (RC-63 (1 м), RC-64 (2 м) RC-65 (5 м) (не се доставя)
RCA csatlakozós vezeték (RC-63 (1 m), RC-64 (2m), vagy RC-65 (5 m)) (nem tartozék)
Штырьковый шнур RCA (RC-63 (1 м), RC-64 (2 м) или RC-65 (5 м)) (не входит в комплект)
Blue
Niebieski
Син
Kék
Голубой
ANT REM
Max. supply current 0.1 A
Maks. natężenie prądu 0,1 A
Максимален ток 0,1 A
Max. tápáram 0,1A
Макс. текущий ток 0,1 A
Blue/white striped
W niebiesko-białe paski
На ивици бяло/синьо
Kék/fehér csíkos
С голубыми/белыми полосками
AMP REM
(XR-C353)*
Max. supply current 0.3 A
Maks. natężenie prądu 0,3 A
Максимален ток 0,3 A
Max. tápáram 0,3A
Макс. текущий ток 0,3 A
to the +12 V power terminal which is energized in the accessory position on the ignition key switch
Be sure to connect the black earth lead first
do przyłącza +12 V, które jest zasilane w pozycji kluczyka zapłonu, w której funkcjonuje wyposażenie pojazdu
Proszę pamiętać, by podłączyć do niego czarny przewód uziemienia jako pierwszy
Към захранващата клема с 12 V, към която се подава ток, когато ключът за запалване е в положение за спомагателни уреди. Уверете се, че първо сте свързали черния заземяващ проводник.
a + 12V-os csatlakozási ponthoz, mely áramot kap, ha az inditókulcs félig van elfordítva
Először a fekete földelővezetéket csatlakoztassa hozzá.
к положительной клемме 12 В, которая находится под напряжением, когда ключ зажигания в промежуточной позиции
Сначала подключите к ней черный заземляющий провод
Red
Czerwony
Червен
Piros
Красный
Light blue
Jasno-niebieski
Светло син
Világoskék
Светло-голубой
to the interface cable of a car telephone
do międzyfazowego kabla telefonu komórkowego
към интефейсен кабел на автотелефон
rádiótelefon interfész vezetékéhez
к наружному кабелю автомобильного телефона
TEL MUTE
(XR-C353)*
to the +12 V power terminal which is energized at all times
Be sure to connect the black earth lead first.
do przyłącza +12 V, które jest zawsze zasilane
Proszę pamiętać, by podłączyć do niego czarny przewód uziemienia jako pierwszy.
Към захранващата клема с 12 V, към която винаги се подава ток. Уверете се , че първо сте свързали черния заземяващ проводник.
A +12V-os, folyamatosan feszültség alatt álló csatlakozási ponthoz
Először a fekete földelővezetéket csatlakoztassa hozzá.
к положительной клемме 12 В, которая находится под напряжением всегда
Сначала подключите к ней черный заземляющий провод.
Yellow
Żółty
Жълт
Sárga
Желтый
White
Biały
Бял
Fehér
Белый
Front speakers
Głośniki przednie
Предни високоговорители
Első hangszórók
Передние громкоговорители
Left
Lewy
Ляв
Bal
Левый
Grey
Szary
Сив
Szürke
Серый
Right
Prawy
Десен
Jobb
Правый
Green
Zielony
Зелен
Zöld
Зеленый
Rear speakers
Głośniki tylne
Задни високоговорители
Hátsó hangszórók
Задние громкоговорители
Left
Lewy
Ляв
Bal
Левый
Purple
Liliowy
Виолетов
Bíbor
Лиловый
Right
Prawy
Десен
Jobb
Правый
to a metal point of the car
First connect the black earth lead, then connect the yellow and red power input leads.
do metalowego elementu pojazdu
Proszę wpierw podłączyć czarny przewód uziemienia, następnie proszę podłączyć żółty i czerwony przewód zasilający.
към метална повърхност от автомобила
Първо свържете черния заземяващ проводник и след това свържете жълтия и червения захранващи проводници.
az autó egyik fém pontjához
Először a fekete földelővezetéket, majd a sárga és a piros színű tápvezetéket csatlakoztassa.
к металлической точке на массе автомобиля
Сначала подключите черный заземляющий провод, затем - желтый и красный провода питания.
Black
Czarny
Черен
Fekete
Черный

Reset button

When the installation and connections are complete, be sure to press the reset button with a ballpoint pen etc.

Przycisk Reset

Po zakończeniu montażu i podłączenia radia należy pamiętać o wciśnięciu przy pomocy długopisu itp. przycisku reset (powrót do pierwotnego ustawienia).

Бутон Reset

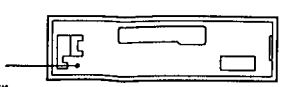
След като завършите инсталирането и свързването, обезателно натиснете бутона за промяна на настройката с върха на химикалка или нещо друго.

Reset gomb

Ha befejezte készüléke beszerelését és csatlakoztatását, feltétlenül nyomja meg a reset gombot egy golyóstollal, vagy más hasonló eszközzel.

Клавиша переустановки

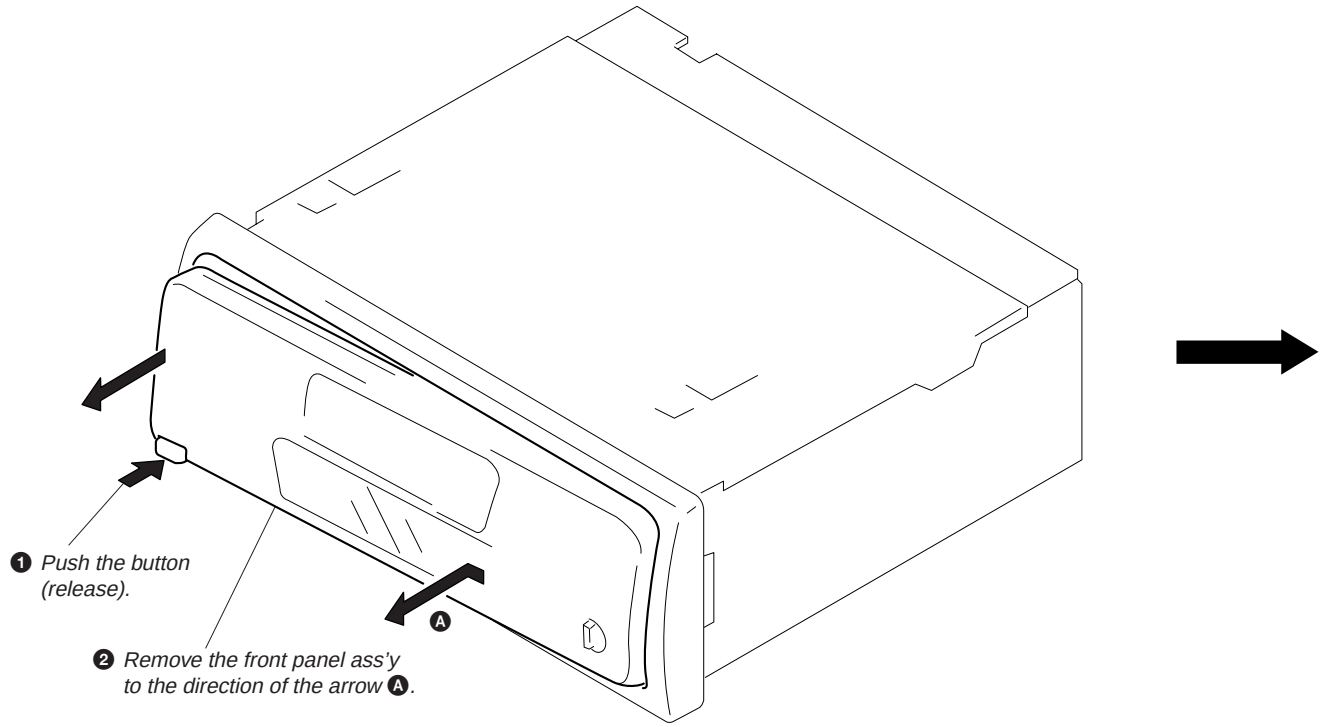
Когда установка и подключения завершены, нажмите клавишу переустановки с помощью шариковой ручки и т.д.



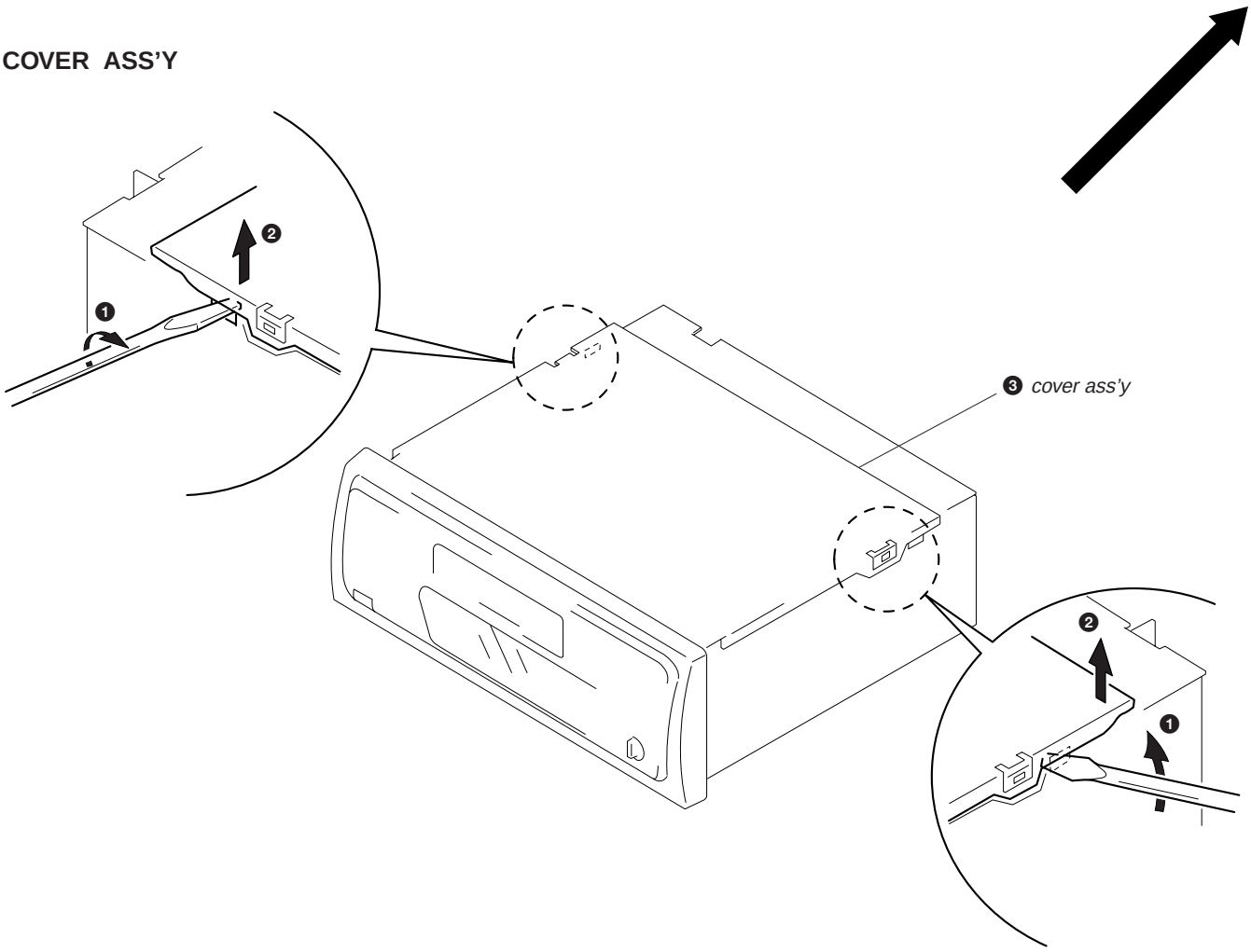
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

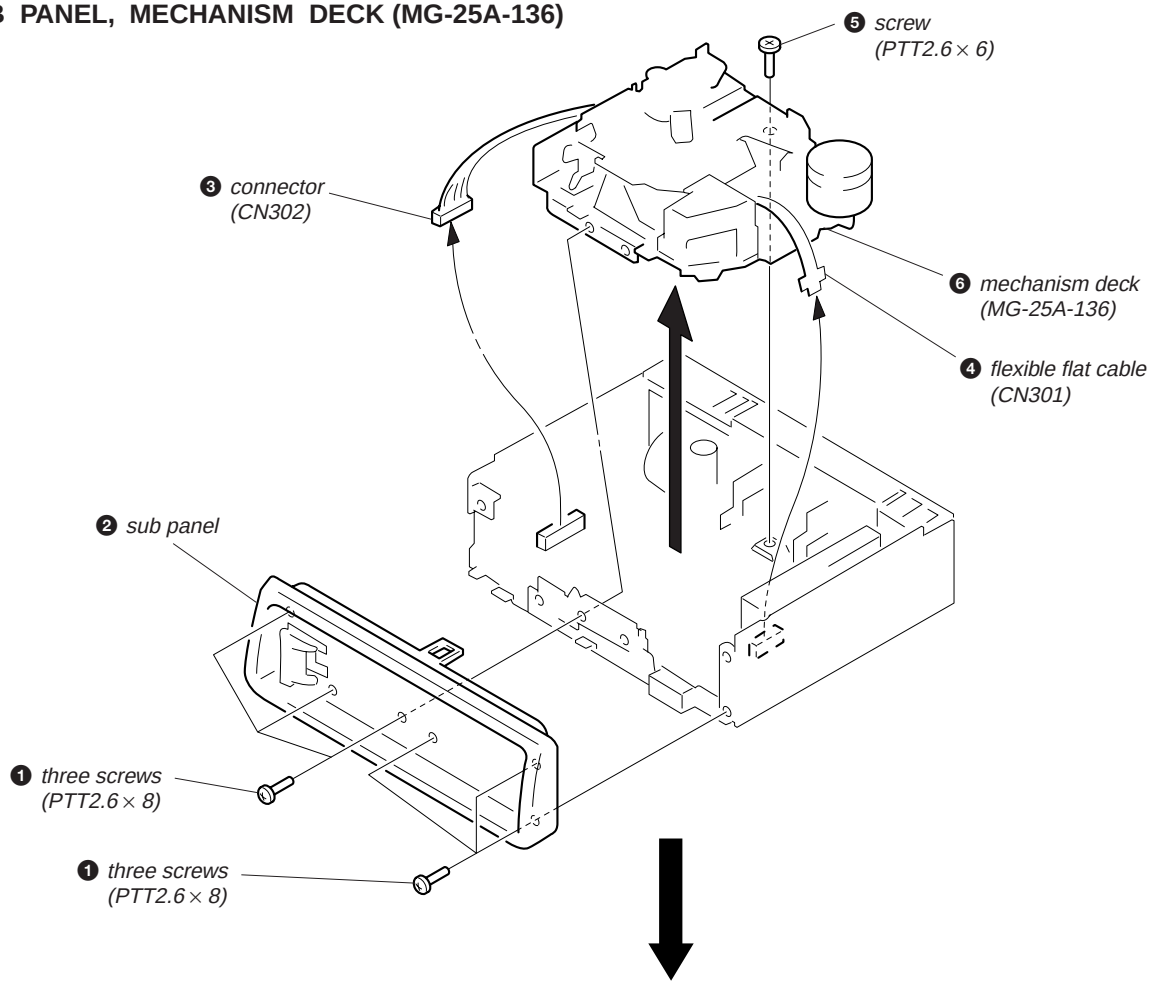
FRONT PANEL ASS'Y



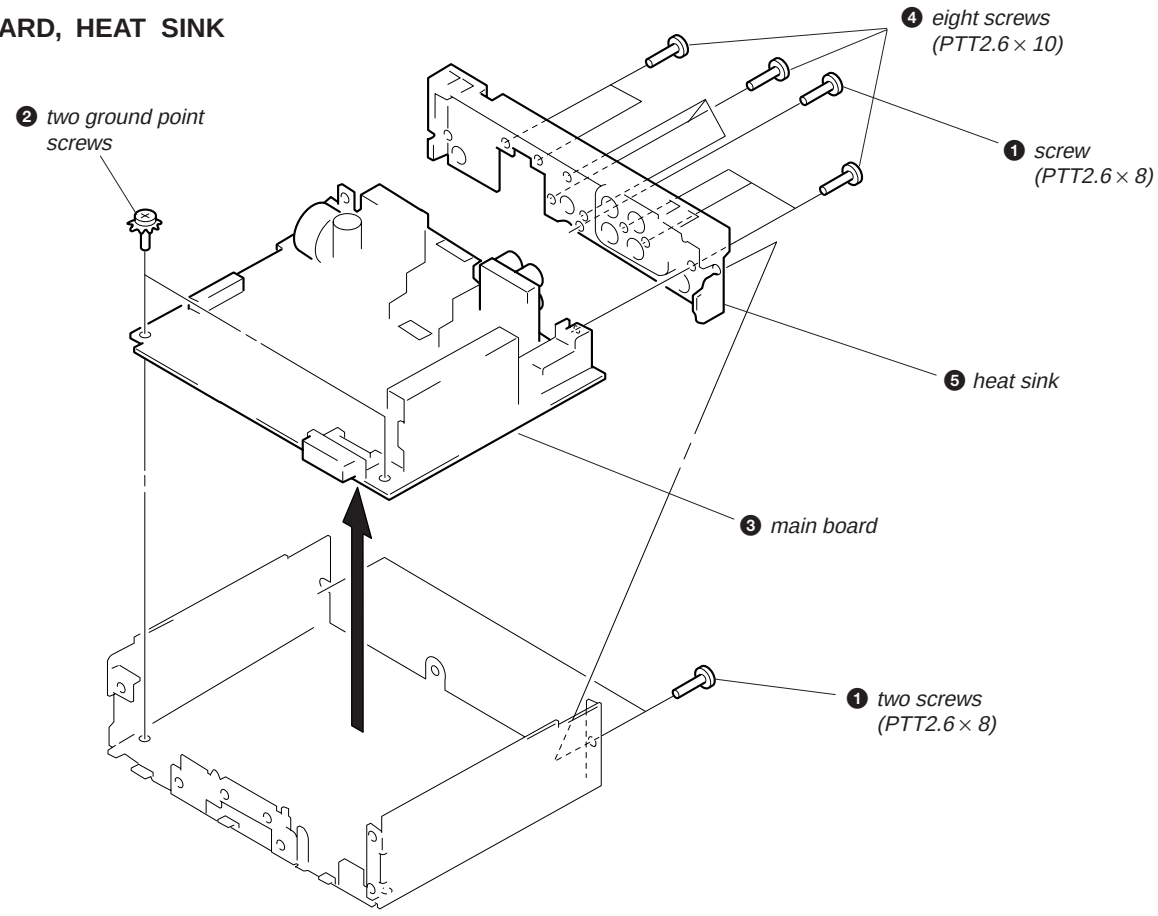
COVER ASS'Y



SUB PANEL, MECHANISM DECK (MG-25A-136)



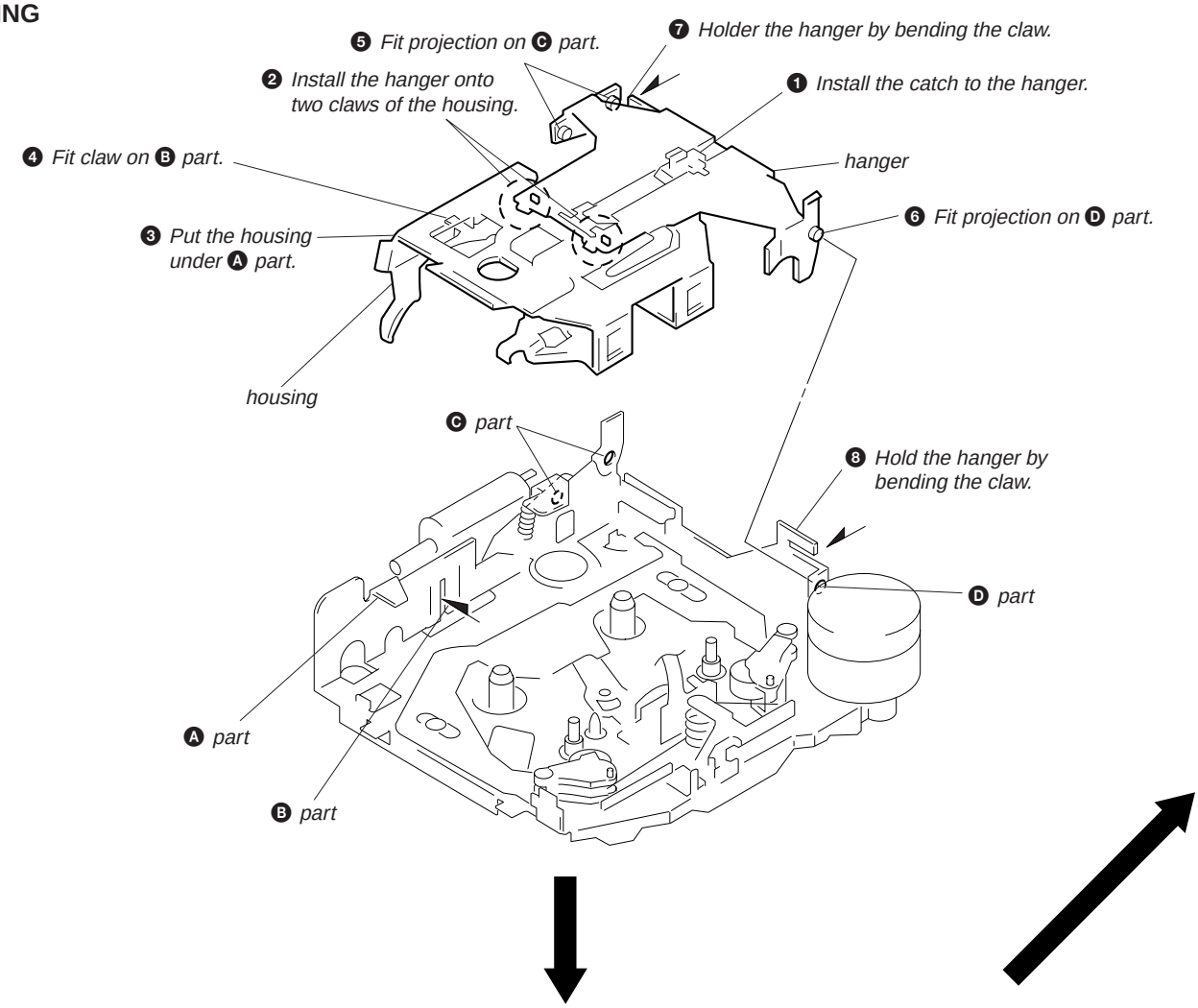
MAIN BOARD, HEAT SINK



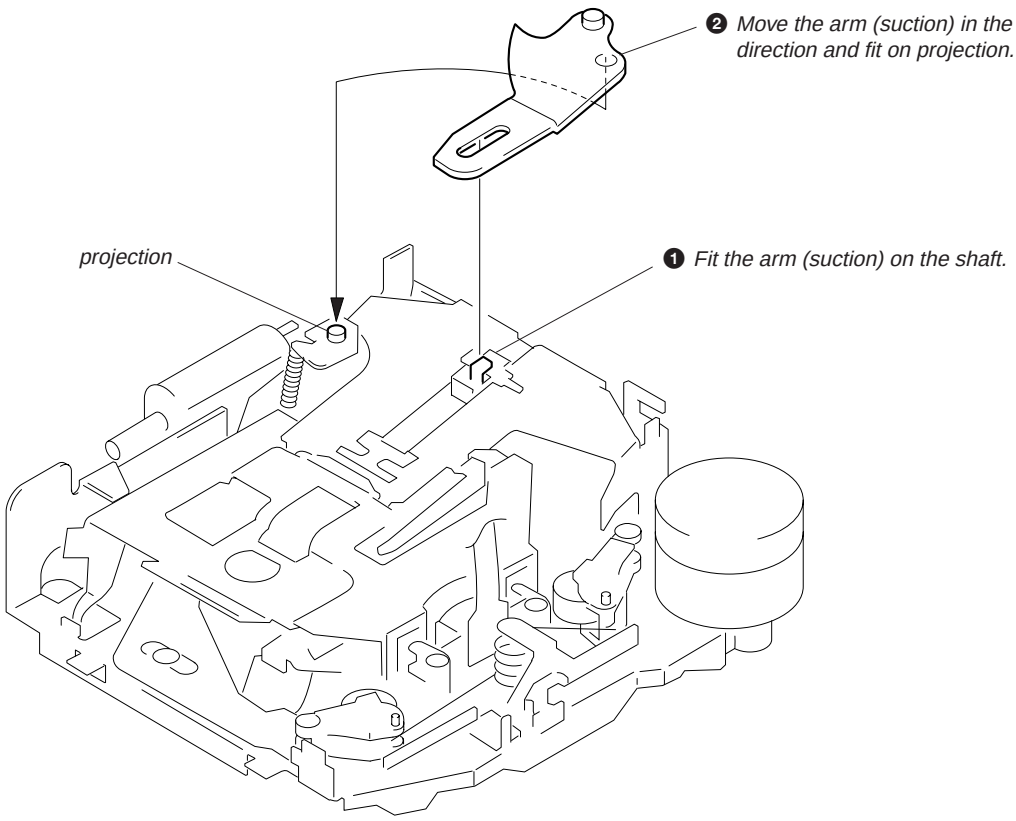
SECTION 3
ASSEMBLY OF MECHANISM DECK

Note: Follow the assembly procedure in the numerical order given.

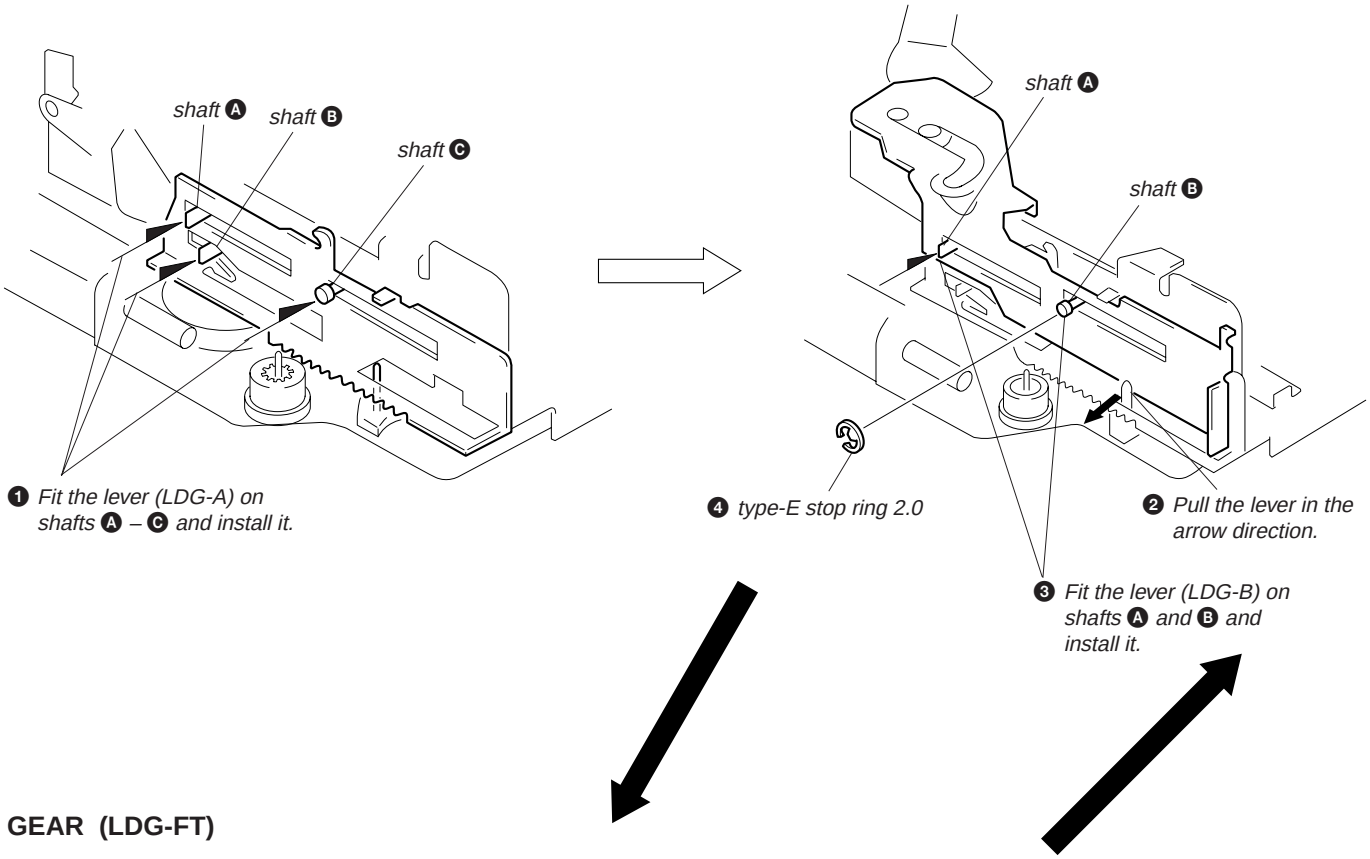
HOUSING


❺ Fit projection on Ⓒ part.
❼ Holder the hanger by bending the claw.
❷ Install the hanger onto two claws of the housing.
❶ Install the catch to the hanger.
❹ Fit claw on Ⓑ part.
hanger
❻ Fit projection on Ⓓ part.
❸ Put the housing under Ⓐ part.
housing
Ⓒ part
❽ Hold the hanger by bending the claw.
Ⓓ part
Ⓐ part
Ⓑ part

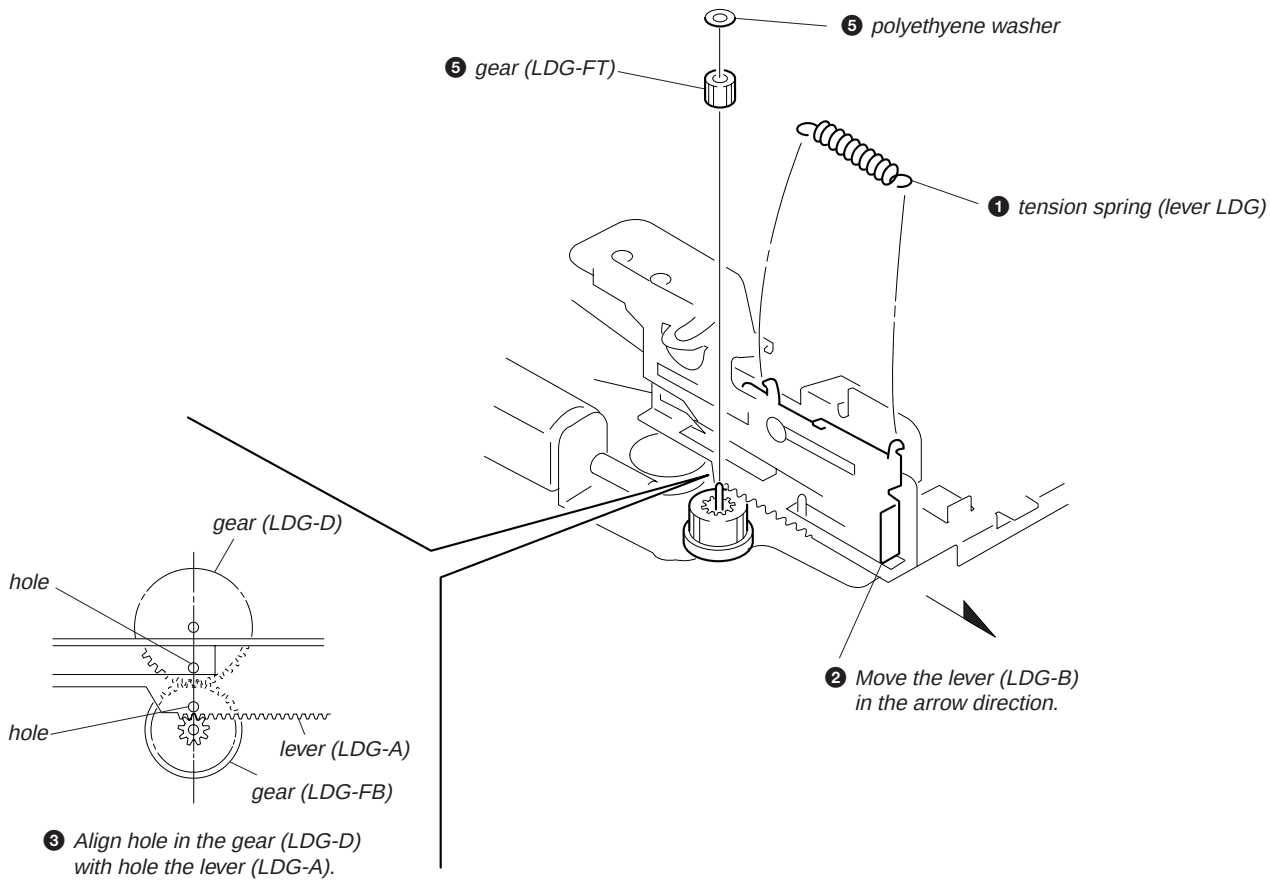
ARM (SUCTION)



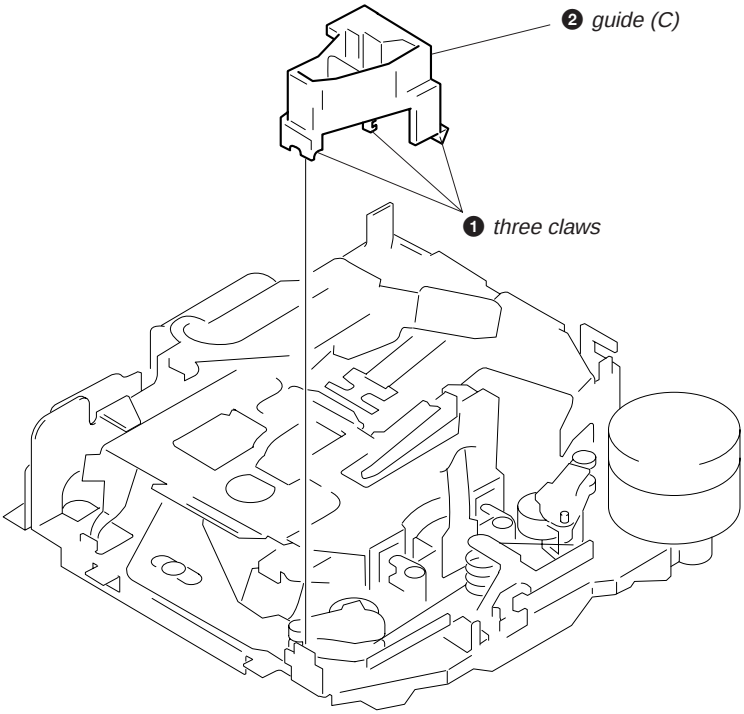
LEVER (LDG-A) / (LDG-B)


shaft Ⓐ
shaft Ⓑ
shaft Ⓒ
shaft Ⓐ
shaft Ⓑ
❶ Fit the lever (LDG-A) on shafts Ⓐ – Ⓒ and install it.
❹ type-E stop ring 2.0
❷ Pull the lever in the arrow direction.
❸ Fit the lever (LDG-B) on shafts Ⓐ and Ⓑ and install it.

GEAR (LDG-FT)


❺ polyethyene washer
❺ gear (LDG-FT)
❶ tension spring (lever LDG)
❷ Move the lever (LDG-B) in the arrow direction.
gear (LDG-D)
hole
hole
lever (LDG-A)
gear (LDG-FB)
❸ Align hole in the gear (LDG-D) with hole the lever (LDG-A).

GUIDE (C)



SECTION 4
MECHANICAL ADJUSTMENTS

1. Clean the following parts with a denatured-alcohol-moistene swab:
   playback head, pinch roller, rubber belt, capstan, idlers
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the power supply voltage unless otherwise noted.

• Torque Measurement

Mode	Torqu Meter	Meter Reading
Forward	CQ-102C	30 – 65 g•cm (0.42 – 0.90 oz•inch)
Forward Back Tension	CQ-102C	0.5 – 4.5 g•cm (0.01 – 0.06 oz•inch)
Reverse	CQ-102RC	30 – 65 g•cm (0.42 – 0.90 oz•inch)
Reverse Back Tension	CA-102RC	0.5 – 4.5 g•cm (0.01 – 0.06 oz•inch)
FF, REW	CQ-201B	60 – 200 g•cm (0.83 – 2.78 oz•inch)

• Tape Tension Measurement

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 90 g (more than 3.18 oz)
Reverse	CQ-403R	more than 90 g (more than 3.18 oz)

SECTION 5
ELECTRICAL ADJUSTMENTS

TEST MODE

This set have the test mode function. In the test mode, FM Auto Scan/Stop Level and AM (MW) Auto Scan/Stop Level adjustments can be performed easier than it in ordinary procedure.

<Set the Test Mode>
1. Set the "power select" switch (S501) is "A" position.
2. Turn ON the regulated power supply. (All LEDs on the set lights up, and the clock is displayed.)
   Note: Press the [OFF] button, if the clock is not displayed.
3. Push the preset [4] button.
4. Push the preset [5] button.
5. Press the preset [1] button for more than two seconds.
6. Then the display indicates all lights, the test mode is set.

<Release the Test mode>
1. Push the [OFF] button.
2. Return the "power select" switch (S501) to initially aet position.

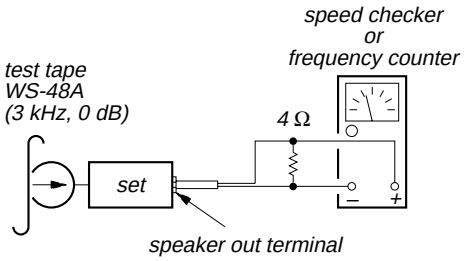
See the adjustment location from on page 17 for the adjustment.

TAPE DECK SECTION | **0 dB=0.775 V**

Tape Speed Adjustment

Procedure:

1. Put the set into the FWD PB mode.



Specification: Constant speed

Speed checker	Frequency counter
–1.5 to +2.5%	2,955 to 3,075 Hz

Adjustment Location: See page 17.

TUNER SECTION | **0 dB=1 µV**

Cautions during repair

When the tuner unit is defective, replace it by a new one because its internal block is difficult to repair.

Note:

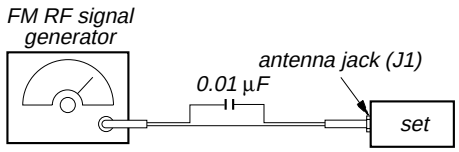
Adjust the tuner section in the sequence shown below.

1. FM Auto Scan/Stop Level Adjustment
2. FM Stereo Separation Adjustment
3. AM (MW) Auto Scan/Stop Level Adjustment

FM Auto Scan/Stop Level Adjustment

Setting:

SOURCE button: FM



Carrier frequency : 98 MHz
Output level : 22 dB (12.6 µV)
Mode : mono
Modulation : 1 kHz, 22.5 kHz deviation (30%)

Procedure:

1. Set to the test mode. (See page 14).
2. Push the SOURCE button and set to FM.

Display

3. Adjust with the volume RV2 on TU1 so that the "FM" indication turns to "FMI" indication on the display window.
   But, in case of already indicated "FMI", turn the RV2 so that put out light "I" indication and adjustment.

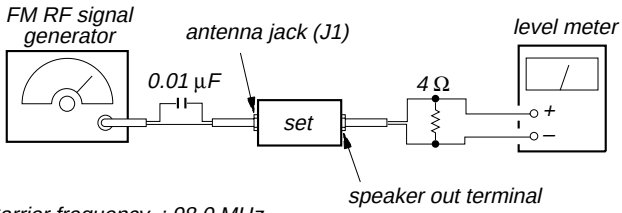
Display

Adjustment Location: See page 17.

FM Stereo Separation Adjustment

Setting:

SOURCE button: FM



Carrier frequency : 98.0 MHz
Output level : 70 dB (3.2 mV)
Mode : stereo
Modulation : main: 1 kHz, 33.75 kHz deviation (45%)
sub: 1 kHz, 33.75 kHz deviation (45%)
19 kHz pilot: 7.5 kHz deviation (10%)

Procedure:

FM Stereo signal generator output channel	Level meter connection	Level meter reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV4 on TU1 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV4 on TU1 for minimum reading.

L-CH Stereo separation: Ⓐ-Ⓑ
R-CH Stereo separation: Ⓒ-Ⓓ
The separations of both channels should be equal.

Specification: Separation more than 28 dB

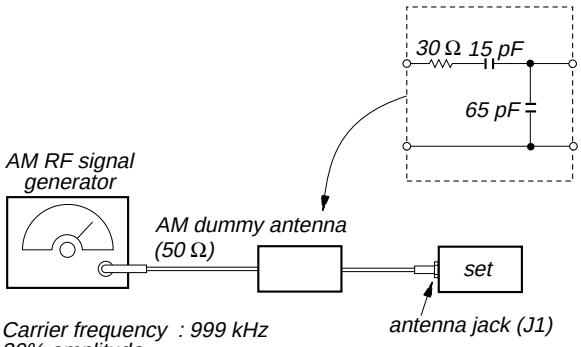
Adjustment Location: See page 17.

AM (MW) Auto Scan/Stop Level Adjustment

Make this adjustment after "FM Auto Scan/Stop Level Adjustment".

Setting:

SOURCE and MODE button: MW

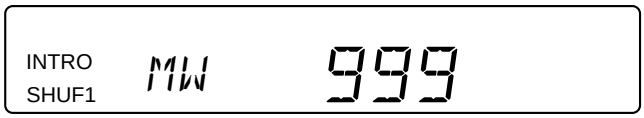


Carrier frequency : 999 kHz
30% amplitude modulation by 1 kHz signal
Output level : 33 dB (44.7 µV)

Procedure:

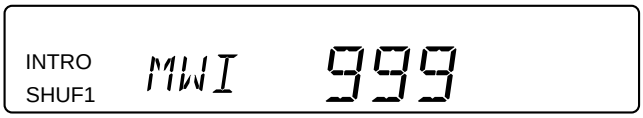
1. Set to the test mode. (See page 14.)
2. Push the SOURCE button and set to FM.
3. Push the MODE button and set to MW.

Display



4. Adjust with the volume RV1 on TU1 so that the "MW" indication turns to "MWI" indication on the display window.
   But, in case of already indicated "MWI", turn the RV1 so that put out light "I" indication and adjustment.

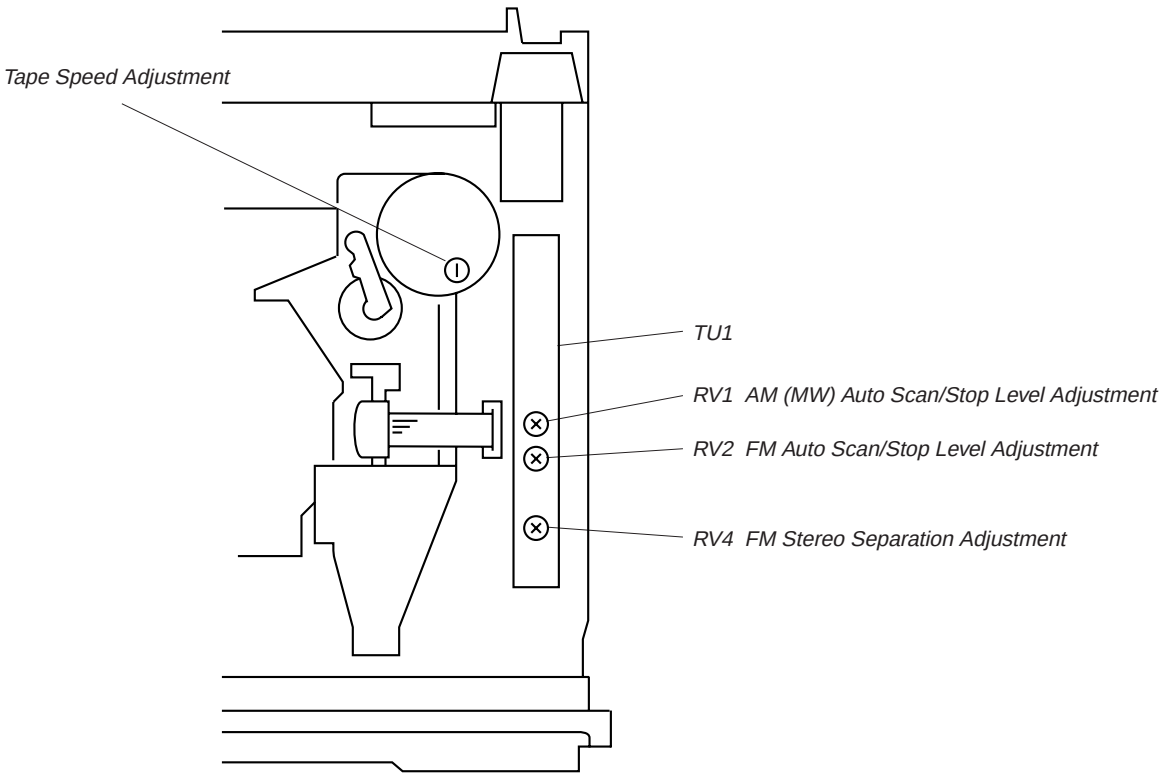
Display



Adjustment Location: See page 17.

Adjustment Location:

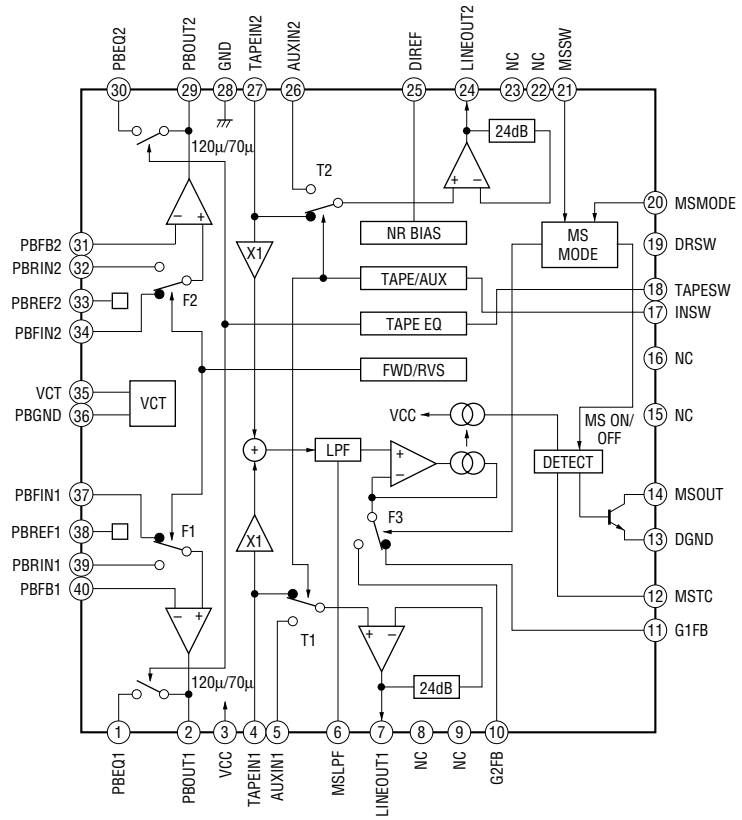
– SET UPPER VIEW –


Tape Speed Adjustment
TU1
RV1 AM (MW) Auto Scan/Stop Level Adjustment
RV2 FM Auto Scan/Stop Level Adjustment
RV4 FM Stereo Separation Adjustment

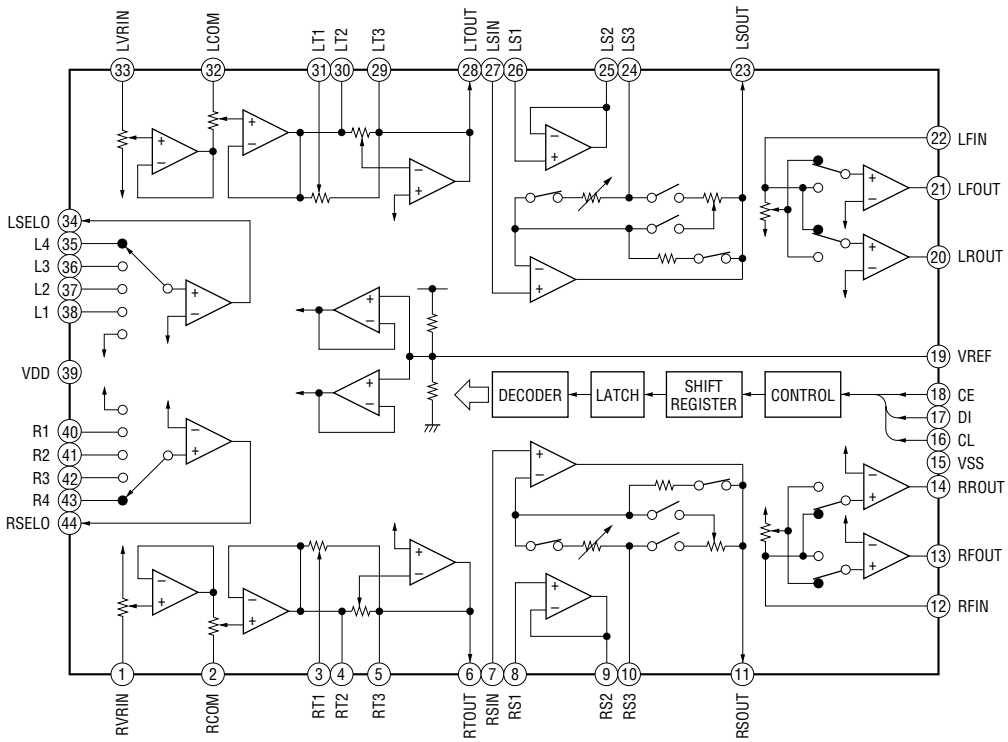
SECTION 6
DIAGRAMS

- **IC Block Diagrams**
  – MAIN Section –

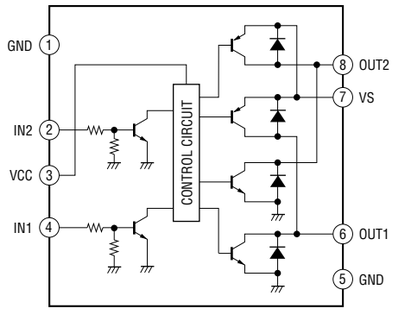
IC301 CXA2509AQ-T4



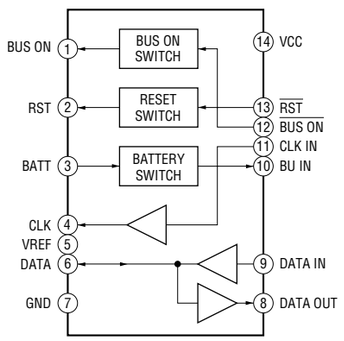
IC331 LC75373ED



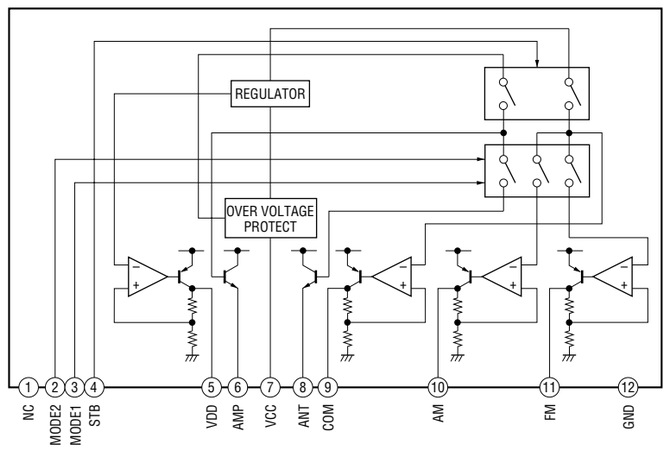
IC351 MM1322XFBE



IC581 BA8270F-E2

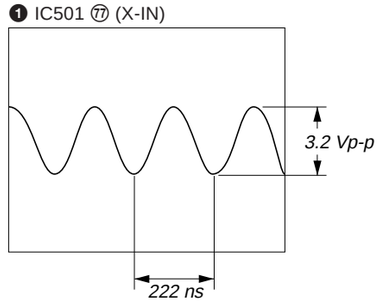


IC611 BA3918-V2



• **Waveform**

❶ IC501 ㊼ (X-IN)



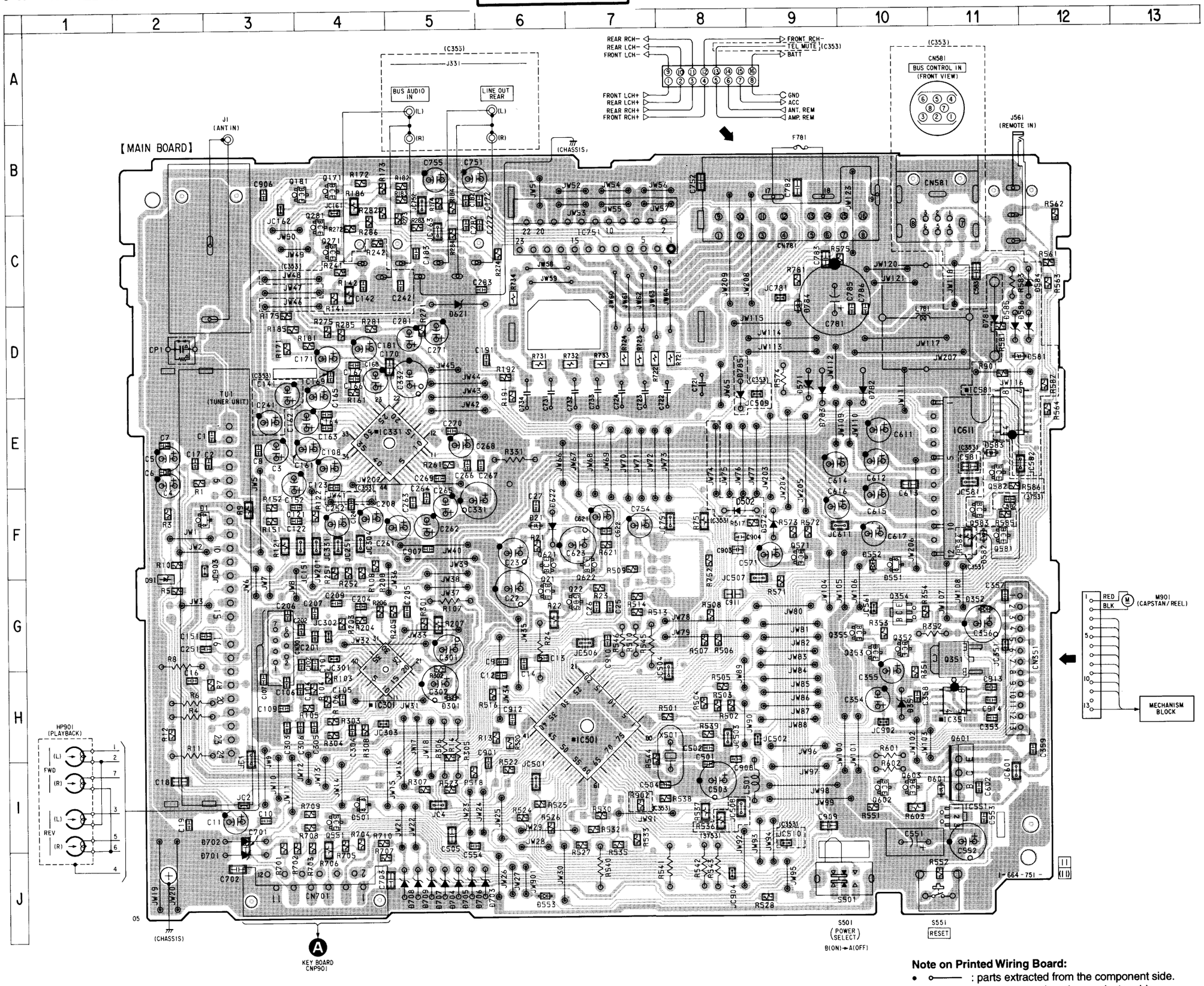
6-1. PRINTED WIRING BOARD – MAIN Section –

SEE ADDITIONAL INFORMATION

• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D1	F-2	IC301	H-4
D21	F-6	IC331	E-4
D91	F-2	IC351	H-11
D301	H-5	IC501	H-7
D351	H-10	IC551	I-11
D352	G-11	△ IC581	E-11
D501	I-4	IC611	E-11
△ D502	F-8	IC751	C-7
D551	F-10		
D552	F-10	Q21	G-6
D553	J-6	Q22	G-7
D571	D-9	Q171	B-4
D572	F-9	Q181	B-4
△ D581	D-12	Q271	C-4
D582	F-11	Q281	C-4
○ D583	E-11	Q351	G-11
△ D584	C-12	Q352	G-10
△ D585	D-11	Q353	G-10
△ D586	D-12	Q354	G-10
D601	I-11	Q355	G-10
D621	D-5	Q551	I-4
D622	F-6	Q571	F-9
D701	J-3	Q581	F-11
D702	I-3	○ Q582	E-11
D703	J-6	○ Q583	F-11
D704	J-5	Q601	H-11
D705	J-5	Q602	I-10
D706	J-5	Q603	I-10
D707	J-5	Q621	F-6
D708	J-5	Q622	F-7
D709	J-5		
D781	D-11		
D782	E-10		
D783	E-9		
D784	D-9		
○ D785	D-8		

○ : XR-3753 only
△ : XR-C353 only

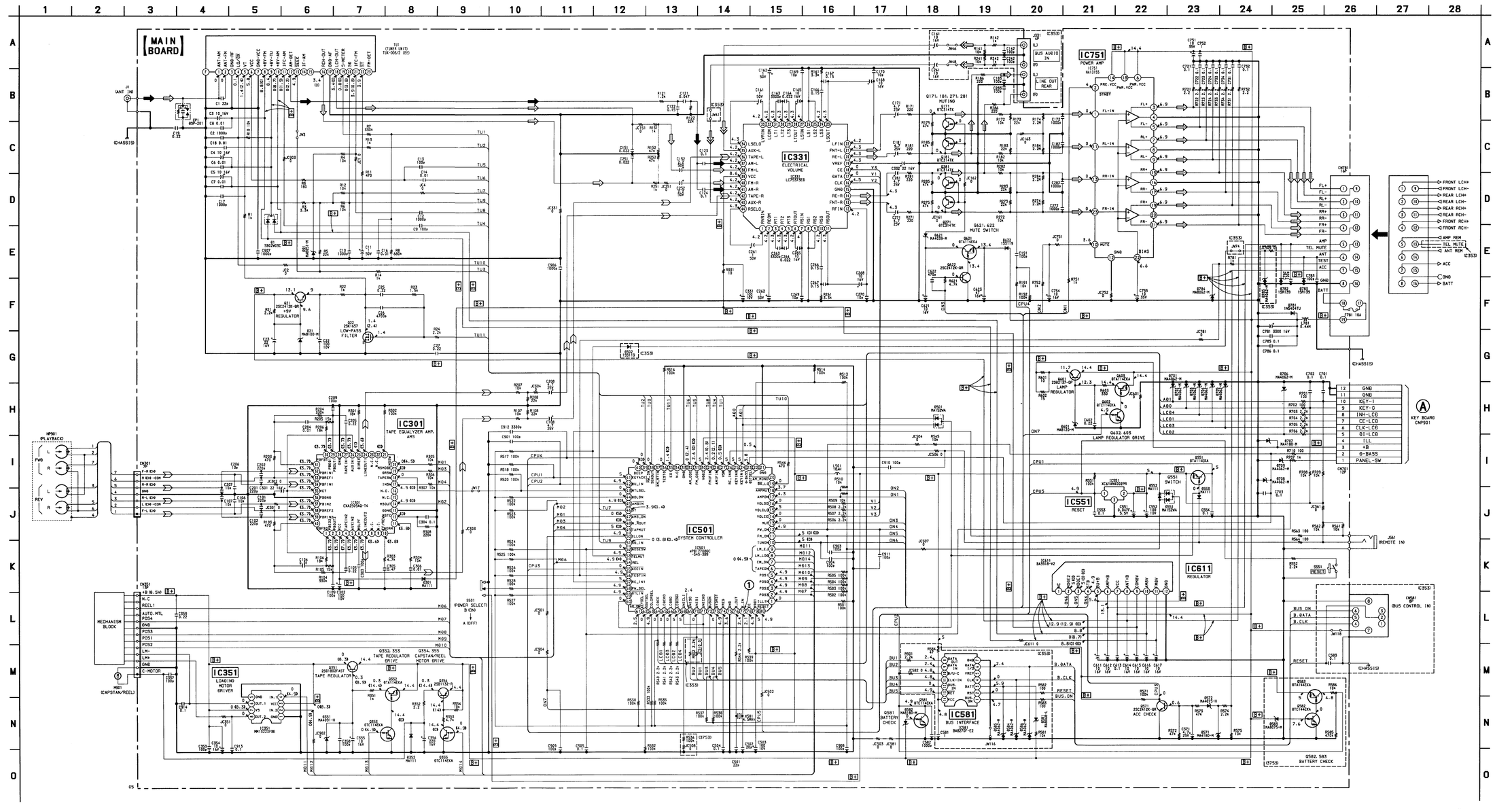


Note on Printed Wiring Board:

- ○—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- △ : internal component.
- ▨ : Pattern from the side which enables seeing.
- Abbreviation
  3753 : XR-3753
  C353 : XR-C353

SEE ADDITIONAL INFORMATION

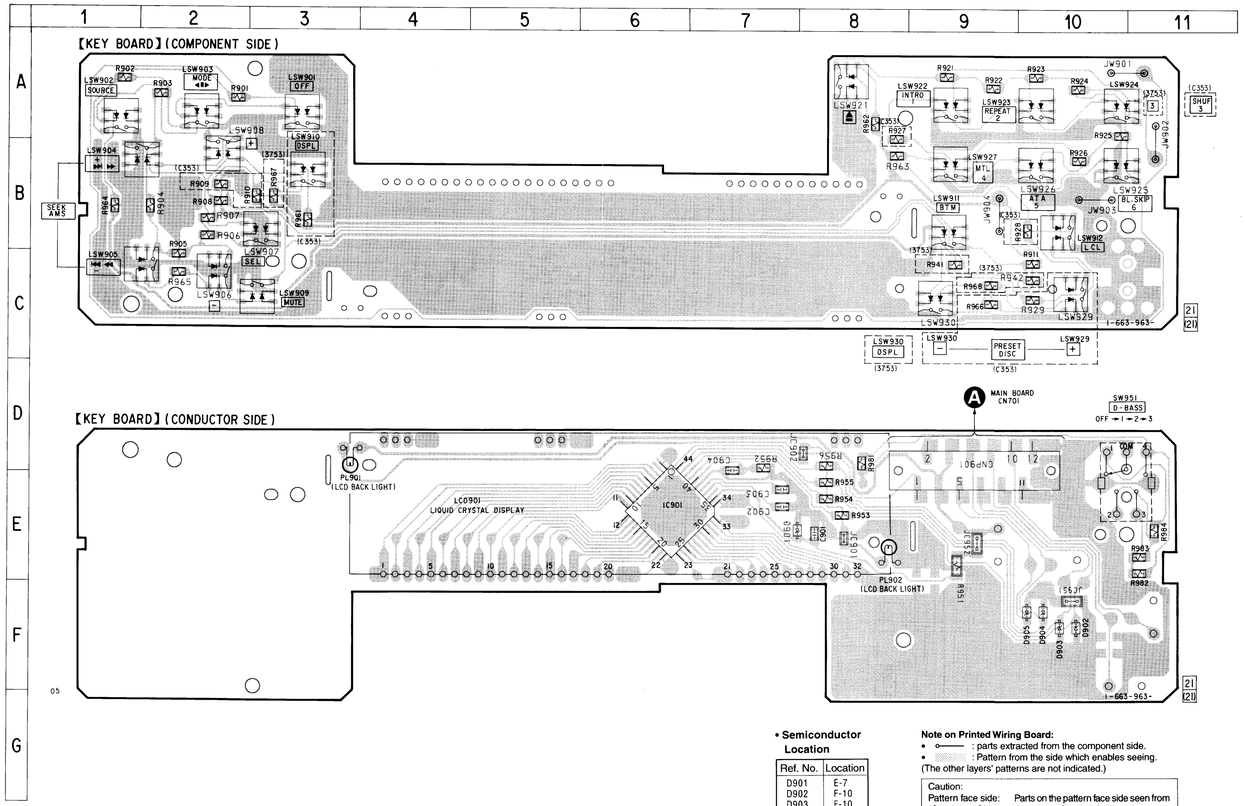
6-2. SCHEMATIC DIAGRAM – MAIN Section – • See page 18 for IC Block Diagrams. • See page 20 for waveform.



Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF
  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line.
- Power voltage is dc 14.4 V and fed with regulated dc power supply from battery and accessory terminals.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : MW (LW)
  << >> : TAPE PLAYBACK
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : MW (LW)
  ⇨ : TAPE PLAYBACK
  ⇨ : BUS AUDIO IN
- Abbreviation
  3753 : XR-3753
  C353 : XR-C353

6-3. PRINTED WIRING BOARD – PANEL Section –



• Semiconductor Location

Ref. No.	Location
D901	E-7
D902	F-10
D903	F-10
D904	F-10
D905	F-10
IC901	E-6

Note on Printed Wiring Board:

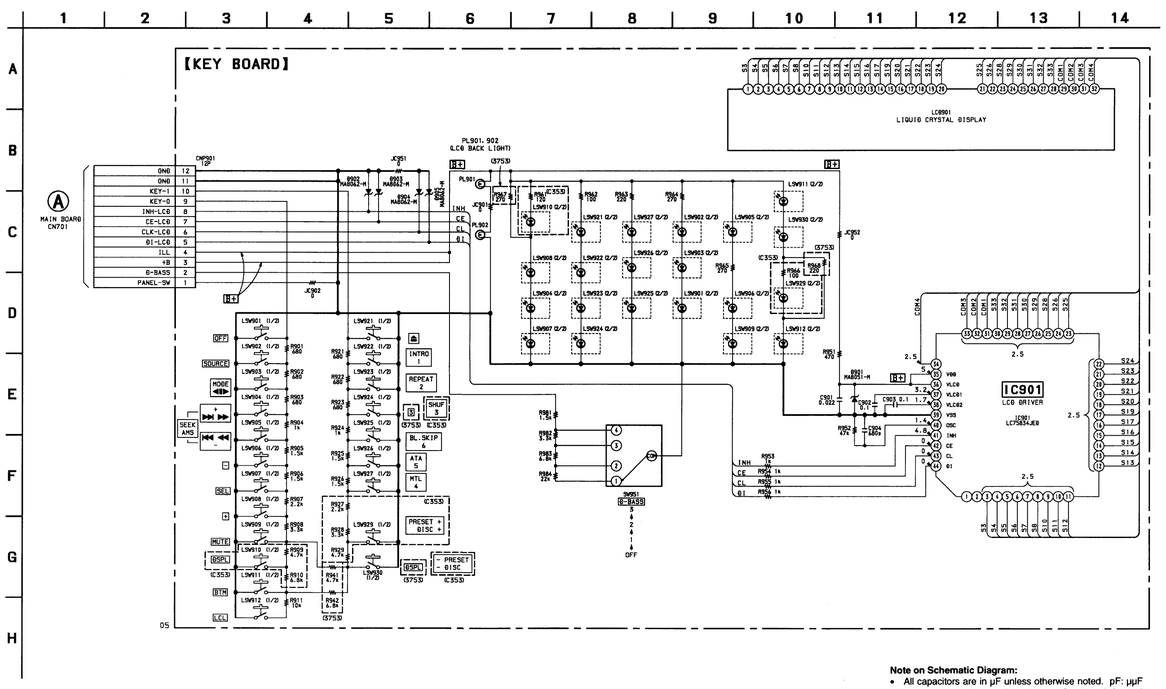
- ○——— : parts extracted from the component side.
- ▨ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:
Pattern face side: (Conductor Side) — Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side) — Parts on the parts face side seen from the parts face are indicated.

- Abbreviation
  3753 : XR-3753
  C353 : XR-C353

6-4. SCHEMATIC DIAGRAM – PANEL Section –



Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- [ ] : panel designation.
- [B+] : B+ Line.
- Power voltage is dc 14.4 V and fed with regulated dc power supply from battery and accessory terminals.
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Abbreviation
  3753 : XR-3753
  C353 : XR-C353

6-5. IC PIN FUNCTION DESCRIPTION

MAIN BOARD IC501 µPD17708GC-545-3B9 (MASTER CONTROLLER)

Pin No.	Pin Name	I/O	Function
1	ILLIN	I	ILLIN signal detection pin (Fixed at "L" in this set)
2, 3	POS 3, 2	I	Tape position detection pin
4, 5	POS 0, 1		
6	TAPEON	O	Tape power supply control pin
7	CM_ON	O	Capstan motor control pin
8	LM_LOD	O	Loading motor control pin (loadig direction)
9	LM_EJ	O	Loading motor control pin (eject direction)
10	TUNON	O	Tuner power supply control pin
11	FM_ON	O	FM power supply control pin
12	PW_ON	O	System power supply control pin
13	MUT	O	System muting control pin At muting: "H"
14	VOLCE	O	Chip enable output pin to electrical volume
15	VOLCLO	O	Clock output pin to electrical volume
16	VOLSO	O	Data output pin to electrical volume
17	AMPON	O	Power amp power supply control pin
18	$\overline{\text{AMPMUT}}$	O	Power amp muting control pin At muting: "L"
19	$\overline{\text{DX}}$_LO	O	DX/local selection control pin
20	$\overline{\text{AM\_MONO}}$	O	AM forced monaural signal output pin Not used (Open)
21	GND	–	GND
22	DSTSEL	I	Destination setting pin (A/D input)
23	D-BASS	I	D-BASS switch input pin (A/D input)
24, 25	KEYIN1, 2	I	Key input pin (A/D input)
26	RC_IN0	I	Rotary remote commander input pin (A/D input)
27	VSM	I	FM/AM signal meter voltage detection pin (A/D input)
28	AMIFIN	I	AM (MW, LW) IF input pin
29	FMIFIN	I	FM IF input pin
30	VDD2	–	Power supply
31	FM_OSC	I	FM OSC signal input pin
32	AM_OSC	I	AM OSC signal input pin
33	GND	–	GND
34	N.C	–	Not used (Open)
35	EOI	O	Main charge-pump output pin
36	TEST0	I	Test pin
37	$\overline{\text{AM\_STIN}}$	I	AM stereo signal input pin Not used (Open)
38	SEKOUT	O	SEEK control signal output pin
39	$\overline{\text{MW}}$_SW	O	MW/SW power supply select pin (Fixed at "L" in this set)
40	BEEP	O	Beep sound output pin
41	KEYACK	O	Key acknowledge signal input pin
42	BU_IN	I	Back up power supply detection pin
43	MTLSEL	I/O	METAL control input/output pin At initial mode: auto/manual selection input of METAL function "L": manual At nanual mode: METAL on/off output "H": on At auto mode: input at ⑤⑨ MTLIN
44	DOLON	I/O	DOLBY control input/output pin (Fixed at "H" in this set) At initial mode: valid/invalid selection input of DOLBY function At normal mode: DOLBY on/off output
45	$\overline{\text{AMSIN}}$	I	Tape music with/without detection pin "L": with music
46	ST	I/O	Stereo detection signal input and forced monaural signal output pin
47	$\overline{\text{AMS\_ON}}$	O	At AMS: "L"
48	N_ROUT	O	Forward/reverse control pin

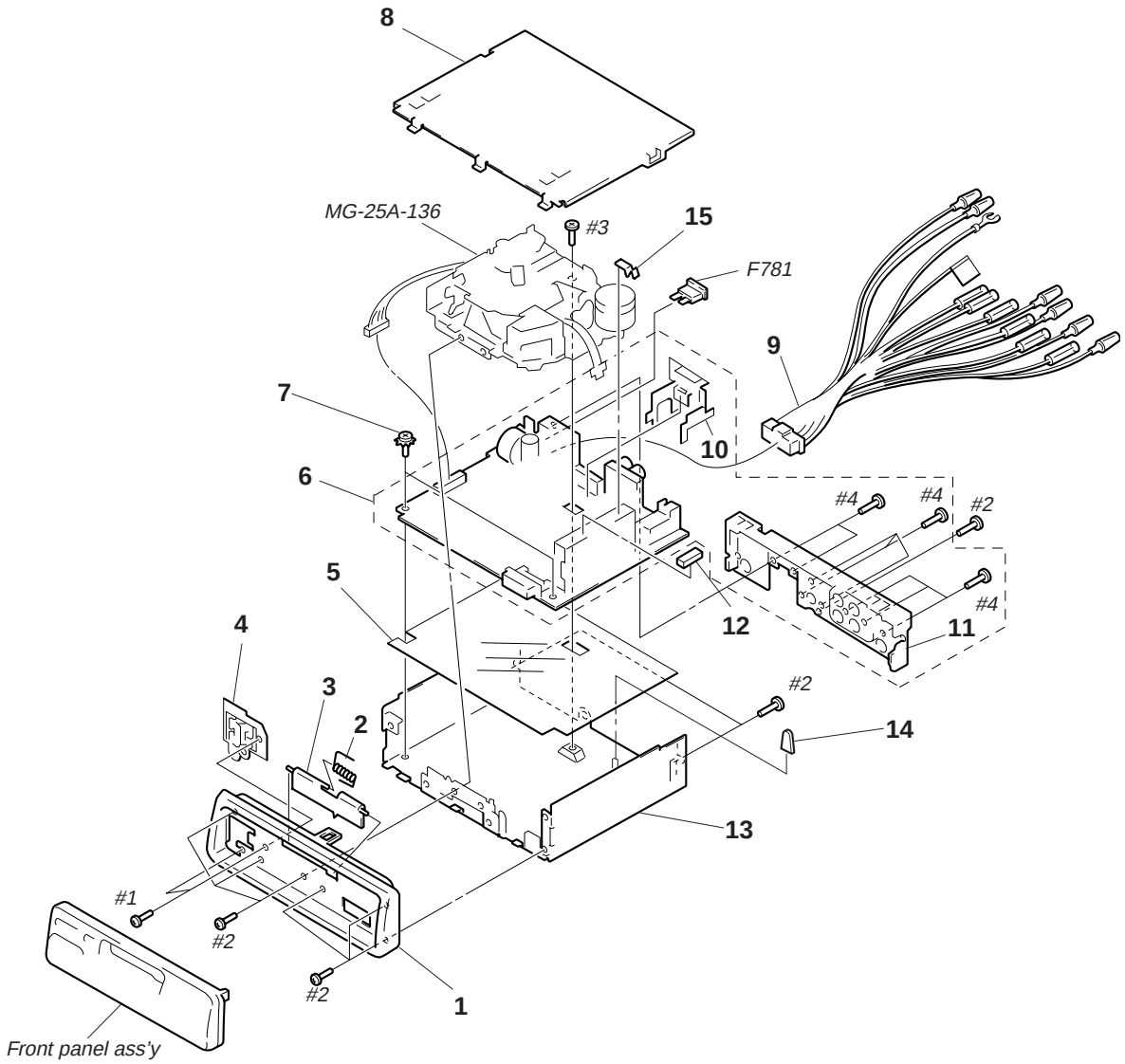
Pin No.	Pin Name	I/O	Function
49	TAPMUT	O	Tape muting control pin At muting: “H”
50	ILLON	O	Illumination power supply control pin At PW SEL on: ACC on: “H” At PW SEL off: Power on: “H”
51	SD_IN	I	Station detection signal input pin
52	$\overline{\text{NOSESW}}$	I	Front panel removal or attaching detection pin
53	$\overline{\text{TELMUT}}$	I	Telephpne muting detection pin “L”: 20 dB audio muting (C353 only)
54	REL	I	Reel table rotation detection pin
55	$\overline{\text{ACCIN}}$	I	Accessory voltage detection pin
56	$\overline{\text{TESTIN}}$	I	Test mode setting pin
57	RC_IN1	I	Rotary remote commander input pin (A/D input)
58	PW_SEL	I	Power select switch input pin
59	$\overline{\text{MTLIN}}$	I	AUTO METAL detection pin “L”: METAL
60	$\overline{\text{AD\_ON}}$	O	Power supply control pin for A/D conversion
61	KEYSEL	I	Key function setting pin
62	SOUTSEL	I	Active select pin for ㊳ SEKOUT
63	COLOR SEL	I	Illumination color setting pin “L”: amber, “H”: green
64	LCDCE	O	LCD chip enable output pin
65	LCDCKO	O	LCD clock output pin
66	LCDSO	O	LCD data output pin
67	$\overline{\text{LCDINH}}$	O	LCD brank indication control pin
68	UNICKI	I	Clock input pin (for SONY BUS) (C353 only)
69	UNISO	O	Data output pin (for SONY BUS) (C353 only)
70	UNISI	I	Data input pin (for SONY BUS) (C353 only) (Fixed at “L” in 3753)
71	UNICKO	O	Clock output pin (for SONY BUS) (C353 only)
72	$\overline{\text{BUSON}}$	O	BUS ON control signai output pin (for SONY BUS) (C353 only)
73	$\overline{\text{SYSRST}}$	O	System reset signal output pin (for SONY BUS) (C353 only)
74	VREG	O	CPU regurator output pin (Fixed at “L” in this set)
75	GND	–	GND
76	X_OUT	O	System clock output pin (4.5 MHz)
77	X_IN	I	System clock input pin (4.5 MHz)
78	CE	I	Fixed at “L”
79	VDD1	–	Power supply
80	$\overline{\text{RESET}}$	I	Reset input pin

SECTION 7
EXPLODED VIEWS

NOTE:

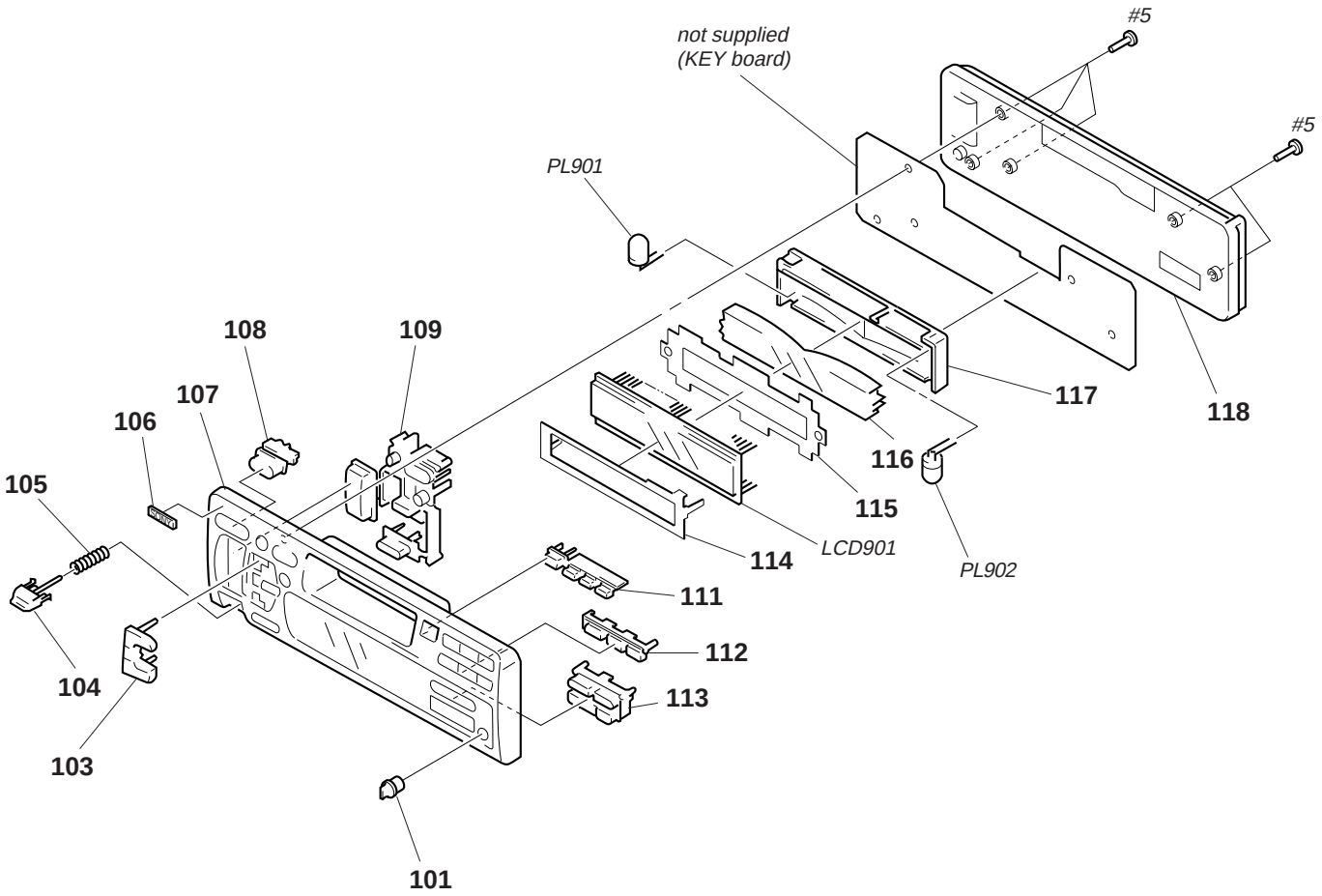
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of the electrical parts list.

(1) CHASSIS SECTION



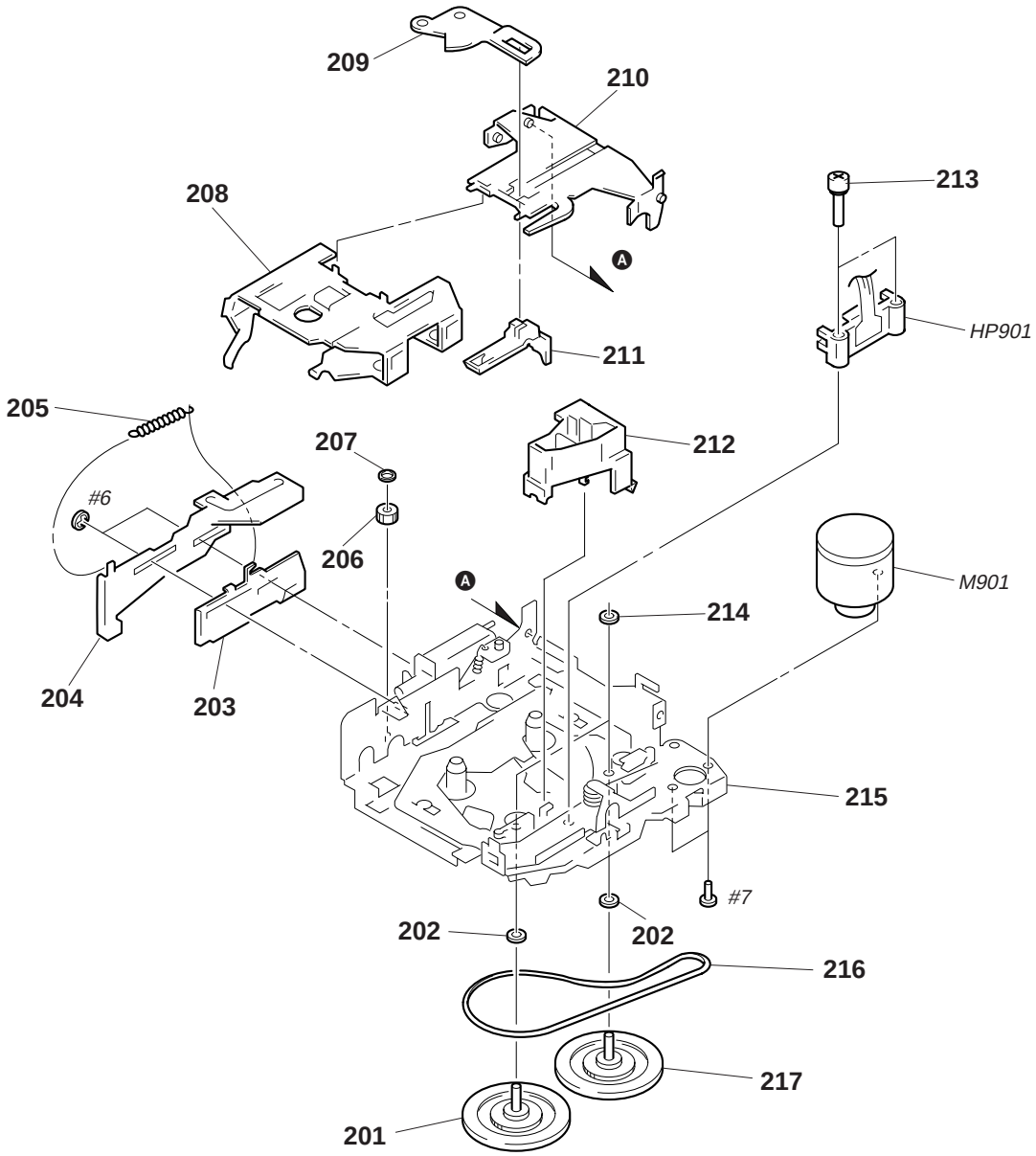
Ref. No.	Part No.	Description	Remark
1	3-009-294-01	PANEL, SUB	
2	3-913-076-01	SPRING (C DOOR), TORSION	
3	3-922-165-81	DOOR, CASSETTE	
4	X-3367-636-1	LOCK ASSY	
* 5	3-014-997-01	INSULATOR	
* 6	A-3309-930-A	MAIN BOARD, COMPLETE (XR-C353)	
* 6	A-3309-931-A	MAIN BOARD, COMPLETE (XR-3753)	
7	3-915-923-01	SCREW, GROUND POINT	
* 8	X-3373-751-1	COVER ASSY	
9	1-776-207-11	CORD (WITH CONNECTOR) (POWER)	(XR-C353)
9	1-776-207-41	CORD (WITH CONNECTOR) (POWER)	(XR-3753)
* 10	3-009-809-01	BRACKET (IC)	
* 11	3-010-516-11	HEAT SINK (BUS THERE) (C) (XR-C353)	
* 11	3-010-517-01	HEAT SINK (BUS NON) (E) (XR-3753)	
12	3-338-263-01	CUSHION (U)	
* 13	3-009-810-01	CHASSIS	
14	3-012-859-01	CAP (25), RUBBER	
15	3-937-650-01	PLATE (C), GROUND	
F781	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	

(2) FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
101	3-009-301-01	BUTTON (D-BASS)	
103	3-009-299-01	BUTTON (L2) (+. –) (XR-C353)	
103	3-010-472-01	BUTTON (L2) (+. –) (XR-3753)	
104	3-009-304-01	BUTTON (RELEASE)	
105	3-918-693-01	SPRING (RELEASE)	
106	3-904-194-01	EMBLEM (NO. 2.5), SONY (XR-C353)	
107	X-3373-668-1	PANEL SUB ASSY (XR-C353)	
107	X-3373-669-1	PANEL SUB ASSY (XR-3753)	
108	3-009-300-01	BUTTON (SOURCE)	
109	3-009-297-01	BUTTON (L)	
(+ ▶▶I ▶▶. SEEK AMS. I◀◀ ◀◀ –. ●. OFF. ●. SEL. MUTE) (XR-C353)			
109	3-009-297-01	BUTTON (L)	
(+ ▶▶I ▶▶. SEEK AMS. I◀◀ ◀◀ –. ●. OFF. SEL. MUTE) (XR-3753)			
111	3-009-308-01	BUTTON (1-3) (⏏. 1. 2. 3) (XR-C353)	
111	3-010-473-01	BUTTON (1-3) (⏏. 1. 2. 3) (XR-3753)	
112	3-009-309-11	BUTTON (4-6) (4. 5. 6) (XR-C353)	
112	3-010-474-11	BUTTON (4-6) (4. 5. 6) (XR-3753)	
113	3-009-312-01	BUTTON (R) B (BTM. LCL. – DISC +) (XR-C353)	
113	3-009-315-01	BUTTON (R) (3) (BTM. LCL. ●) (XR-3753)	
* 114	3-010-282-01	PLATE (LCD), GROUND	
* 115	3-009-305-01	SHEET (REFLECTOR)	
* 116	3-009-302-01	PLATE (LCD), LIGHT GUIDE	
* 117	3-009-303-01	HOLDER (LCD)	
118	3-009-295-01	PANEL, FRONT BACK	
LCD901	1-801-586-11	DISPLAY PANEL, LIQUID CRYSTAL (XR-C353)	
LCD901	1-801-588-11	DISPLAY PANEL, LIQUID CRYSTAL (XR-3753)	
PL901	1-517-633-11	LAMP, PILOT (LCD BACK LIGHT)	
PL902	1-517-633-11	LAMP, PILOT (LCD BACK LIGHT)	

(3) MECHANISM DECK SECTION (MG-25A-136)



Ref. No.	Part No.	Description	Remark
201	A-3291-667-A	CLUTCH (FR) ASSY	
202	3-701-437-21	WASHER	
* 203	3-008-883-01	LEVER (LDG-A)	
* 204	3-008-884-01	LEVER (LDG-B)	
205	3-008-890-01	SPRING (LEVER LDG), TENSION	
206	3-933-335-01	GEAR (LDG-FT)	
207	3-341-753-11	WASHER, POLYETHYLENE	
208	3-008-861-01	HOUSING	
* 209	3-008-882-01	ARM (SUCTION)	
210	3-008-860-01	HANGER	

Ref. No.	Part No.	Description	Remark
211	3-008-874-02	CATCHER	
212	3-933-344-01	GUIDE (C)	
213	3-927-100-01	SCREW (+PS 2X10), SPECIAL	
214	3-364-151-01	WASHER	
215	A-3291-919-A	CHASSIS ASSY (A)	
216	3-928-675-01	BELT (52)	
217	3-936-853-01	FLYWHEEL (F)	
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	

KEY

SECTION 8
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- Abbreviation
  3753: XR-3753
  C353: XR-C353

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		KEY BOARD			
		*********			
*	3-009-302-01	PLATE (LCD), LIGHT GUIDE			
*	3-009-303-01	HOLDER (LCD)			
*	3-009-305-01	SHEET (REFLECTOR)			
*	3-010-282-01	PLATE (LCD), GROUND			
		< CAPACITOR >			
C901	1-163-033-00	CERAMIC CHIP	0.022uF		50V
C902	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C903	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C904	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
		< CONNECTOR >			
CNP901	1-764-423-11	PIN, CONNECTOR 12P			
		< DIODE >			
D901	8-719-420-90	DIODE MA8051-M			
D902	8-719-422-64	DIODE MA8062-M			
D903	8-719-422-64	DIODE MA8062-M			
D904	8-719-422-64	DIODE MA8062-M			
D905	8-719-422-64	DIODE MA8062-M			
		< IC >			
IC901	8-759-443-68	IC LC75834JED			
		< JUMPER RESISTOR >			
JC901	1-216-295-00	CONDUCTOR, CHIP	(2012)		
JC902	1-216-295-00	CONDUCTOR, CHIP	(2012)		
JC951	1-216-296-00	CONDUCTOR, CHIP	(3216)		
JC952	1-216-296-00	CONDUCTOR, CHIP	(3216)		
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-801-588-11	DISPLAY PANEL, LIQUID CRYSTAL (3753)			
LCD901	1-801-586-11	DISPLAY PANEL, LIQUID CRYSTAL (C353)			
		< SWITCH >			
LSW901	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (OFF)			
LSW902	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (SOURCE)			
LSW903	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (MODE ◄I►)			
LSW904	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (SEEK +/AMS ►►I ►►)			
LSW905	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (SEEK –/AMS I◄◄ ◄◄)			
LSW906	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (–)			
LSW907	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (SEL)			
LSW908	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (+)			
LSW909	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (MUTE)			
LSW910	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (DSPL) (C353)			
LSW911	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (BTM)			
LSW912	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (LCL)			
LSW921	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (⏏)			
LSW922	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (INTRO 1)			
LSW923	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (REPEAT 2)			
LSW924	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (3) (3753)			
LSW924	1-762-619-11	SWITCH, KEY BOARD (SHUF 3) (C353)			
LSW925	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (BL.SKIP 6)			
LSW926	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (ATA 5)			
LSW927	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (MTL 4)			
LSW929	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (PRESET +/DISC +) (C353)			
LSW930	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (DSPL) (3753)			
LSW930	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (–PRESET/–DISC) (C353)			
		< PILOT LAMP >			
PL901	1-517-633-11	LAMP, PILOT (LCD BACK LIGHT)			
PL902	1-517-633-11	LAMP, PILOT (LCD BACK LIGHT)			
		< RESISTOR >			
R901	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R902	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R903	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R904	1-208-437-41	METAL GLAZE	1K	2%	1/10W
R905	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R906	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R907	1-208-445-41	METAL GLAZE	2.2K	2%	1/10W
R908	1-208-449-41	METAL GLAZE	3.3K	2%	1/10W
R909	1-208-453-41	METAL GLAZE	4.7K	2%	1/10W (C353)
R910	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W (C353)
R911	1-208-462-41	METAL GLAZE	10K	2%	1/10W
R921	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R922	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R923	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R924	1-208-437-41	METAL GLAZE	1K	2%	1/10W
R925	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W

Ref. No.	Part No.	Description			Remark
R926	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R927	1-208-445-41	METAL GLAZE	2.2K	2%	1/10W (C353)
R928	1-208-449-41	METAL GLAZE	3.3K	2%	1/10W (C353)
R929	1-208-453-41	METAL GLAZE	4.7K	2%	1/10W (C353)
R941	1-208-453-41	METAL GLAZE	4.7K	2%	1/10W (3753)
R942	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W (3753)
R951	1-216-190-00	METAL GLAZE	470	5%	1/8W
R952	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R953	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R954	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R955	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R956	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R961	1-216-027-00	METAL CHIP	120	5%	1/10W (C353)
R962	1-216-025-00	METAL GLAZE	100	5%	1/10W
R963	1-216-033-00	METAL CHIP	220	5%	1/10W
R964	1-216-035-00	METAL CHIP	270	5%	1/10W
R965	1-216-035-00	METAL CHIP	270	5%	1/10W
R966	1-216-025-00	METAL GLAZE	100	5%	1/10W (C353)
R967	1-216-035-00	METAL CHIP	270	5%	1/10W (3753)
R968	1-216-033-00	METAL CHIP	220	5%	1/10W (3753)
R981	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R982	1-208-449-41	METAL GLAZE	3.3K	2%	1/10W
R983	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R984	1-216-081-00	METAL CHIP	22K	5%	1/10W
		< SWITCH >			
SW951	1-762-937-11	SWITCH, ROTARY (D-BASS)			
**********					
*	A-3309-930-A	MAIN BOARD, COMPLETE (C353)			
*	A-3309-931-A	MAIN BOARD, COMPLETE (3753)			
		**********			
*	3-009-809-01	BRACKET (IC)			
*	3-010-517-01	HEAT SINK (BUS NON) (E) (3753)			
*	3-010-516-11	HEAT SINK (BUS THERE) (C) (C353)			
		< CAPACITOR >			
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C2	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C3	1-126-157-11	ELECT	10uF	20%	16V
C4	1-126-157-11	ELECT	10uF	20%	16V
C5	1-126-157-11	ELECT	10uF	20%	16V
C6	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C7	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C8	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C9	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C10	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C11	1-126-160-11	ELECT	1uF	20%	50V
C12	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C13	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C14	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C16	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C17	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C18	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C19	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C22	1-124-584-00	ELECT	100uF	20%	10V
C23	1-124-234-00	ELECT	22uF	20%	16V
C25	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C26	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C27	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C101	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C102	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C104	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C105	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C106	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C107	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C108	1-126-163-11	ELECT	4.7uF	20%	50V
C109	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C121	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C122	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C123	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C124	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C141	1-126-157-11	ELECT	10uF	20%	16V (C353)
C142	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (C353)
C151	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C152	1-124-257-00	ELECT	2.2uF	20%	50V
C161	1-126-160-11	ELECT	1uF	20%	50V
C162	1-126-160-11	ELECT	1uF	20%	50V
C163	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C164	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C165	1-126-157-11	ELECT	10uF	20%	16V
C166	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C167	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C168	1-126-157-11	ELECT	10uF	20%	16V
C169	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C170	1-163-157-00	CERAMIC CHIP	10PF	5%	50V
C171	1-126-163-11	ELECT	4.7uF	20%	50V
C172	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C181	1-126-163-11	ELECT	4.7uF	20%	50V
C182	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C183	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C191	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C201	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C202	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C204	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C205	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C206	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C207	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C208	1-126-163-11	ELECT	4.7uF	20%	50V
C209	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C241	1-126-157-11	ELECT	10uF	20%	16V (C353)
C242	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (C353)
C251	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C252	1-124-257-00	ELECT	2.2uF	20%	50V
C261	1-126-160-11	ELECT	1uF	20%	50V
C262	1-126-160-11	ELECT	1uF	20%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C263	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C264	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C265	1-126-157-11	ELECT	10uF	20%	16V
C266	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C267	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C268	1-126-157-11	ELECT	10uF	20%	16V
C269	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C270	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C271	1-126-163-11	ELECT	4.7uF	20%	50V
C272	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C281	1-126-163-11	ELECT	4.7uF	20%	50V
C282	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C283	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C301	1-124-234-00	ELECT	22uF	20%	16V
C302	1-124-584-00	ELECT	100uF	20%	10V
C303	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C304	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C305	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C306	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C331	1-124-584-00	ELECT	100uF	20%	10V
C332	1-124-234-00	ELECT	22uF	20%	16V
C353	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C354	1-126-157-11	ELECT	10uF	20%	16V
C355	1-126-157-11	ELECT	10uF	20%	16V
C356	1-126-934-11	ELECT	220uF	20%	16V
C357	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C358	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C359	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C501	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C502	1-163-234-11	CERAMIC CHIP	20PF	5%	50V
C503	1-124-584-00	ELECT	100uF	20%	10V
C504	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C505	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C551	1-125-701-11	CAPACITOR	0.047F		5.5V
C552	1-124-584-00	ELECT	100uF	20%	10V
C553	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C554	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C571	1-126-163-11	ELECT	4.7uF	20%	50V
C581	1-162-638-11	CERAMIC CHIP	1uF		16V (C353)
C582	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C583	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V (C353)
C602	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C611	1-126-157-11	ELECT	10uF	20%	16V
C612	1-126-157-11	ELECT	10uF	20%	16V
C613	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C614	1-126-157-11	ELECT	10uF	20%	16V
C615	1-126-157-11	ELECT	10uF	20%	16V
C616	1-126-157-11	ELECT	10uF	20%	16V
C617	1-126-157-11	ELECT	10uF	20%	16V
C621	1-126-157-11	ELECT	10uF	20%	16V
C622	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C623	1-124-589-11	ELECT	47uF	20%	16V
C701	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C702	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C703	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C721	1-136-165-00	FILM	0.1uF		50V
C722	1-136-165-00	FILM	0.1uF		50V
C723	1-136-165-00	FILM	0.1uF		50V
C724	1-136-165-00	FILM	0.1uF		50V
C731	1-136-165-00	FILM	0.1uF		50V
C732	1-136-165-00	FILM	0.1uF		50V
C733	1-136-165-00	FILM	0.1uF		50V
C734	1-136-165-00	FILM	0.1uF		50V
C751	1-126-096-11	ELECT	10uF	20%	35V
C752	1-107-682-11	CERAMIC CHIP	1uF	10%	16V
C754	1-126-157-11	ELECT	10uF	20%	16V
C755	1-126-096-11	ELECT	10uF	20%	35V
C781	1-126-936-11	ELECT	3300uF	20%	16V
C782	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C783	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C785	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C786	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C901	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C903	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C904	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C906	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C907	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C908	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C909	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C910	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C911	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C912	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C913	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C914	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
		< CONNECTOR >			
CN301	1-766-260-11	CONNECTOR, FFC/FPC (ZIF) 7P			
* CN351	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P			
CN581	1-580-907-31	PLUG, CONNECTOR 8P (BUS CONTROL IN)			(C353)
CN701	1-764-422-11	PLUG, CONNECTOR 12P			
CN781	1-774-701-11	PIN, CONNECTOR 16P			
		< SPARK GAP CAPACITOR >			
CP1	1-519-504-11	GAP, DISCHARGE			
		< DIODE >			
D1	8-719-991-65	DIODE SB02W03C			
D21	8-719-423-10	DIODE MA8100-M-TX			
D91	8-719-420-90	DIODE MA8051-M			
D301	8-719-404-49	DIODE MA111			
D351	8-719-035-91	DIODE MA4091-H (TA)			
D352	8-719-404-49	DIODE MA111			
D501	8-719-400-20	DIODE MA152WA			
D502	8-719-911-19	DIODE 1SS119 (C353)			
D551	8-719-400-20	DIODE MA152WA			
D552	8-719-404-49	DIODE MA111			
D553	8-719-404-49	DIODE MA111			
D571	8-719-034-94	DIODE MA4180-M (QZ)			
D572	8-719-110-03	DIODE RD7.5ESB2			
D581	8-719-017-62	DIODE MA8068-L-TX (C353)			
D582	8-719-057-80	DIODE MA8160-M-TX			
D583	8-719-422-76	DIODE MA8075-M (3753)			
D584	8-719-035-74	DIODE MA4062-M (TA) (C353)			
D585	8-719-035-74	DIODE MA4062-M (TA) (C353)			

Ref. No.	Part No.	Description	Remark
D586	8-719-035-74	DIODE MA4062-M (TA) (C353)	
D601	8-719-423-32	DIODE MA8120-M	
D621	8-719-035-54	DIODE MA4039-M (TA)	
D622	8-719-911-19	DIODE 1SS119	
D701	8-719-035-74	DIODE MA4062-M (TA)	
D702	8-719-035-74	DIODE MA4062-M (TA)	
D703	8-719-035-74	DIODE MA4062-M (TA)	
D704	8-719-035-74	DIODE MA4062-M (TA)	
D705	8-719-035-74	DIODE MA4062-M (TA)	
D706	8-719-035-74	DIODE MA4062-M (TA)	
D707	8-719-034-94	DIODE MA4180-M (QZ)	
D708	8-719-035-74	DIODE MA4062-M (TA)	
D709	8-719-035-74	DIODE MA4062-M (TA)	
D781	8-719-049-38	DIODE 1N5404TU	
D782	8-719-970-02	DIODE 1SR139-400	
D783	8-719-970-02	DIODE 1SR139-400	
D784	8-719-422-64	DIODE MA8062-M	
D785	8-719-035-74	DIODE MA4062-M (TA) (C353)	
		< IC >	
IC301	8-752-079-78	IC CXA2509AQ-T4	
IC331	8-759-443-67	IC LC75373ED	
IC351	8-759-395-97	IC MM1322XFBE	
IC501	8-759-462-38	IC uPD17708GC-545-3B9	
IC551	8-759-363-81	IC XC61AN4002PR	
IC581	8-759-449-89	IC BA8270F-E2 (C353)	
IC611	8-759-347-49	IC BA3918-V2	
IC751	8-759-369-41	IC HA13155	
		< JACK >	
J1	1-764-808-14	JACK (ANT) (ANT IN)	
J331	1-774-699-12	JACK, PIN 4P (BUS AUDIO IN/LINE OUT REAR) (C353)	
J561	1-566-822-41	JACK (REMOTE IN)	
		< JUMPER RESISTOR >	
JC1	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC2	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC4	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC151	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC161	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC162	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC163	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC251	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC301	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC302	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC303	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC304	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC331	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC351	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC501	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC502	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC503	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC504	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC506	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC507	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC508	1-216-296-00	CONDUCTOR, CHIP (3216) (3753)	
JC509	1-216-295-00	CONDUCTOR, CHIP (2012) (C353)	
JC510	1-216-295-00	CONDUCTOR, CHIP (2012) (C353)	
JC561	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC581	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC582	1-216-296-00	CONDUCTOR, CHIP (3216) (C353)	
JC601	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC611	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC751	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC752	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC781	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC902	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC903	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC904	1-216-295-00	CONDUCTOR, CHIP (2012)	
		< COIL >	
L501	1-410-509-11	INDUCTOR 10uH	
L781	1-411-669-12	COIL, CHOKE 0.4uH	
		< TRANSISTOR >	
Q21	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q22	8-729-021-94	TRANSISTOR 2SK1657-T1B	
Q171	8-729-920-21	TRANSISTOR DTC314TKH04	
Q181	8-729-920-21	TRANSISTOR DTC314TKH04	
Q271	8-729-920-21	TRANSISTOR DTC314TKH04	
Q281	8-729-920-21	TRANSISTOR DTC314TKH04	
Q351	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q352	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q353	8-729-900-53	TRANSISTOR DTC114EK	
Q354	8-729-106-60	TRANSISTOR 2SB1115A	
Q355	8-729-900-53	TRANSISTOR DTC114EK	
Q551	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q571	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q581	8-729-900-53	TRANSISTOR DTC114EK	
Q582	8-729-027-59	TRANSISTOR DTC144EKA-T146 (3753)	
Q583	8-729-027-38	TRANSISTOR DTA144EKA-T146 (3753)	
Q601	8-729-423-99	TRANSISTOR 2SD2137-OP	
Q602	8-729-900-53	TRANSISTOR DTC114EK	
Q603	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q621	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q622	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		< RESISTOR >	
R1	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R3	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R4	1-249-429-11	CARBON 10K 5% 1/4W	
R5	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R6	1-249-429-11	CARBON 10K 5% 1/4W	
R7	1-216-109-00	METAL CHIP 330K 5% 1/10W	
R8	1-247-899-11	CARBON 680K 5% 1/4W	
R9	1-216-180-00	METAL GLAZE 180 5% 1/8W	
R10	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R11	1-249-413-11	CARBON 470 5% 1/4W	
R12	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R13	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R14	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R21	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R22	1-216-198-00	METAL GLAZE 1K 5% 1/8W	
R23	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R24	1-249-421-11	CARBON 2.2K 5% 1/4W	

MAIN

Ref. No.	Part No.	Description			Remark
R103	1-216-041-00	METAL CHIP	470	5%	1/10W
R104	1-216-109-00	METAL CHIP	330K	5%	1/10W
R105	1-216-077-00	METAL CHIP	15K	5%	1/10W
R106	1-216-079-00	METAL CHIP	18K	5%	1/10W
R107	1-249-429-11	CARBON	10K	5%	1/4W
R108	1-216-081-00	METAL CHIP	22K	5%	1/10W
R121	1-216-200-11	METAL GLAZE	1.2K	5%	1/8W
R122	1-216-081-00	METAL CHIP	22K	5%	1/10W
R141	1-216-073-00	METAL CHIP	10K	5%	1/10W (C353)
R142	1-216-198-00	METAL GLAZE	1K	5%	1/8W (C353)
R151	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R152	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R161	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R171	1-216-033-00	METAL CHIP	220	5%	1/10W
R172	1-216-073-00	METAL CHIP	10K	5%	1/10W
R173	1-216-081-00	METAL CHIP	22K	5%	1/10W
R174	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R175	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R181	1-216-033-00	METAL CHIP	220	5%	1/10W
R182	1-216-073-00	METAL CHIP	10K	5%	1/10W
R183	1-216-081-00	METAL CHIP	22K	5%	1/10W
R184	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R185	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R186	1-216-182-00	METAL GLAZE	220	5%	1/8W
R191	1-216-073-00	METAL CHIP	10K	5%	1/10W
R192	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R203	1-216-041-00	METAL CHIP	470	5%	1/10W
R204	1-216-109-00	METAL CHIP	330K	5%	1/10W
R205	1-216-077-00	METAL CHIP	15K	5%	1/10W
R206	1-216-079-00	METAL CHIP	18K	5%	1/10W
R207	1-216-222-00	METAL GLAZE	10K	5%	1/8W
R208	1-216-081-00	METAL CHIP	22K	5%	1/10W
R241	1-216-073-00	METAL CHIP	10K	5%	1/10W (C353)
R242	1-216-049-11	METAL GLAZE	1K	5%	1/10W (C353)
R251	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R252	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R261	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R271	1-216-033-00	METAL CHIP	220	5%	1/10W
R272	1-216-073-00	METAL CHIP	10K	5%	1/10W
R273	1-216-081-00	METAL CHIP	22K	5%	1/10W
R274	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R275	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R281	1-216-033-00	METAL CHIP	220	5%	1/10W
R282	1-216-073-00	METAL CHIP	10K	5%	1/10W
R283	1-216-081-00	METAL CHIP	22K	5%	1/10W
R284	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R285	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R286	1-216-033-00	METAL CHIP	220	5%	1/10W
R301	1-216-079-00	METAL CHIP	18K	5%	1/10W
R302	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R303	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R304	1-216-077-00	METAL CHIP	15K	5%	1/10W
R305	1-249-429-11	CARBON	10K	5%	1/4W
R306	1-249-429-11	CARBON	10K	5%	1/4W
R307	1-216-073-00	METAL CHIP	10K	5%	1/10W
R308	1-216-105-00	METAL CHIP	220K	5%	1/10W
R331	1-249-393-11	CARBON	10	5%	1/4W
R351	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R352	1-249-385-11	CARBON	2.2	5%	1/4W
R353	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R354	1-216-073-00	METAL CHIP	10K	5%	1/10W
R501	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R502	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R503	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R504	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R505	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R506	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R507	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R508	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R509	1-216-073-00	METAL CHIP	10K	5%	1/10W
R510	1-249-429-11	CARBON	10K	5%	1/4W
R513	1-216-699-11	METAL CHIP	100K	0.5%	1/10W
R514	1-216-699-11	METAL CHIP	100K	0.5%	1/10W
R516	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R517	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R518	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R520	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R522	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R523	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R524	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R525	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R526	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R527	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R528	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R530	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R532	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R533	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R535	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R536	1-216-246-00	METAL GLAZE	100K	5%	1/8W (3753)
R537	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R538	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R539	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R540	1-249-421-11	CARBON	2.2K	5%	1/4W
R541	1-249-421-11	CARBON	2.2K	5%	1/4W
R542	1-249-421-11	CARBON	2.2K	5%	1/4W
R543	1-249-421-11	CARBON	2.2K	5%	1/4W
R544	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R545	1-249-429-11	CARBON	10K	5%	1/4W
R546	1-249-413-11	CARBON	470	5%	1/4W
R551	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R552	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R561	1-208-806-11	METAL GLAZE	10K	0.5%	1/10W
R562	1-208-806-11	METAL GLAZE	10K	0.5%	1/10W
R563	1-216-025-00	METAL GLAZE	100	5%	1/10W
R564	1-216-025-00	METAL GLAZE	100	5%	1/10W
R571	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R572	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R573	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R574	1-249-421-11	CARBON	2.2K	5%	1/4W
R575	1-216-073-00	METAL CHIP	10K	5%	1/10W
R581	1-216-073-00	METAL CHIP	10K	5%	1/10W (C353)
R582	1-216-025-00	METAL GLAZE	100	5%	1/10W (C353)

Ref. No.	Part No.	Description			Remark
R583	1-247-807-31	CARBON	100	5%	1/4W (C353)
R584	1-216-166-00	METAL GLAZE	47	5%	1/8W (C353)
R585	1-216-113-00	METAL CHIP	470K	5%	1/10W (3753)
R586	1-216-073-00	METAL CHIP	10K	5%	1/10W (3753)
R601	1-249-393-11	CARBON	10	5%	1/4W
R602	1-249-395-11	CARBON	15	5%	1/4W
R603	1-216-186-00	METAL GLAZE	330	5%	1/8W
R621	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R701	1-216-025-00	METAL GLAZE	100	5%	1/10W
R702	1-216-025-00	METAL GLAZE	100	5%	1/10W
R703	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R704	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R705	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R706	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R707	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R708	1-208-806-11	METAL GLAZE	10K	0.5%	1/10W
R709	1-208-806-11	METAL GLAZE	10K	0.5%	1/10W
R710	1-216-025-00	METAL GLAZE	100	5%	1/10W
R721	1-216-134-00	METAL CHIP	2.2		1/8W
R722	1-216-134-00	METAL CHIP	2.2		1/8W
R723	1-216-134-00	METAL CHIP	2.2		1/8W
R724	1-216-134-00	METAL CHIP	2.2		1/8W
R731	1-216-134-00	METAL CHIP	2.2		1/8W
R732	1-216-134-00	METAL CHIP	2.2		1/8W
R733	1-216-134-00	METAL CHIP	2.2		1/8W
R734	1-216-134-00	METAL CHIP	2.2		1/8W
R751	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R752	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R781	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R901	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (C353)
R902	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (C353)
		< SWITCH >			
S501	1-571-478-11	SWITCH, SLIDE (POWER SELECT)			
S551	1-692-431-21	SWITCH, TACTILE (RESET)			
		< TUNER UNIT >			
TU1	A-3282-031-A	TUNER UNIT TUX-006/2 (EE)			
		< VIBRATOR >			
X501	1-567-713-11	VIBRATOR, CRYSTAL (4.5MHz)			

****

		MISCELLANEOUS
		**********
9	1-776-207-11	CORD (WITH CONNECTOR) (POWER) (C353)
9	1-776-207-41	CORD (WITH CONNECTOR) (POWER) (3753)
F781	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)

Ref. No.	Part No.	Description	Remark
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	

****

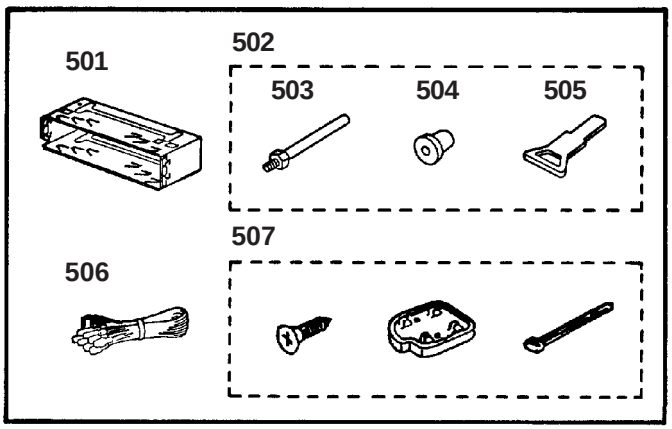
		**********
		HARDWARE LIST
		**********
#1	7-621-772-10	SCREW +B 2X4
#2	7-685-793-09	SCREW +PTT 2.6X8 (S)
#3	7-685-792-09	SCREW +PTT 2.6X6 (S)
#4	7-685-794-09	SCREW +PTT 2.6X10 (S)
#5	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT
#6	7-624-104-04	STOP RING 2.0, TYPE-E
#7	7-627-553-17	PRECISION SCREW +P 2X2 TYPE 3

****

		ACCESSORIES & PACKING MATERIALS
		**********
	X-3373-617-1	CASE ASSY (for FRONT PANEL)
	1-473-067-31	REMOTE COMMANDER (RM-X2S)
	3-859-580-11	MANUAL, INSTRUCTION (ENGLISH, POLISH, RUSSIAN, HUNGARIAN, BULGARIAN)
	3-859-581-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, POLISH, RUSSIAN, HUNGARIAN, BULGARIAN)

****

		PARTS FOR INSTALLATION AND CONNECTIONS
		**********
501	3-916-161-42	FRAME, FITTING
502	X-3370-077-1	SCREW ASSY (AE. KEY), FITTING
503	3-386-828-01	SCREW, FITTING
504	3-349-410-01	BUSHING
505	3-388-078-01	KEY
506	1-776-207-11	CORD (WITH CONNECTOR) (POWER) (C353)
506	1-776-207-41	CORD (WITH CONNECTOR) (POWER) (3753)
507	X-3369-817-1	BRACKET ASSY



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XR-3753/C353

SONY

East European Model

SERVICE MANUAL

SUPPLEMENT-1

File this supplement with the service manual.

Subject:
1. Mechanism Deck Modification (MG-25F-136)
2. Main Board Modification

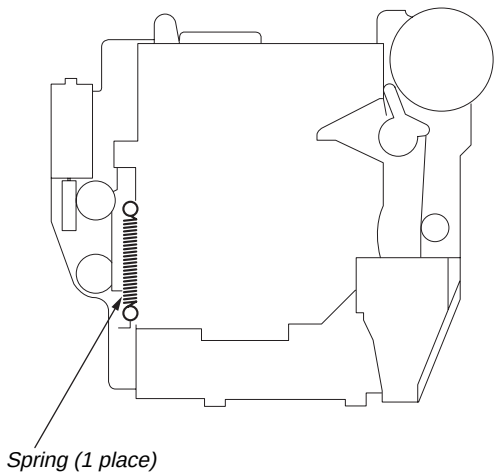
(SPM-98041)

1. MECHANISM DECK MODIFICATION (MG-25F-136)

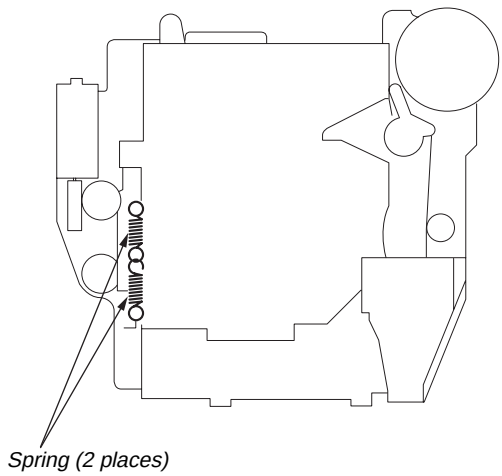
The mechanism deck was changed from MG-25A-136 to MG-25F-136. This supplement contains only the assembly of mechanism deck and exploded view.

- **New/Former Discrimination**

Former type : MG-25A-136



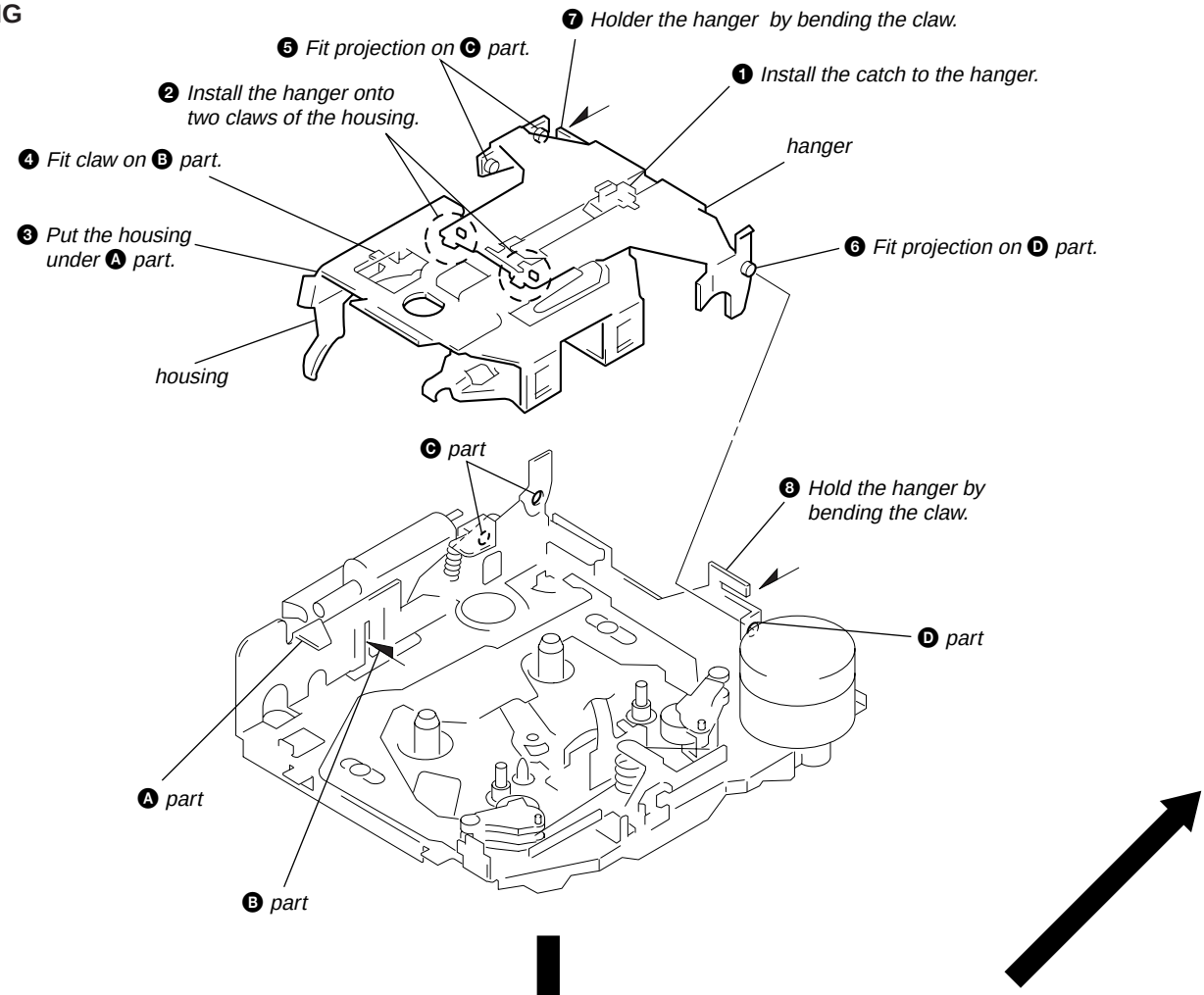
New type : MG-25F-136



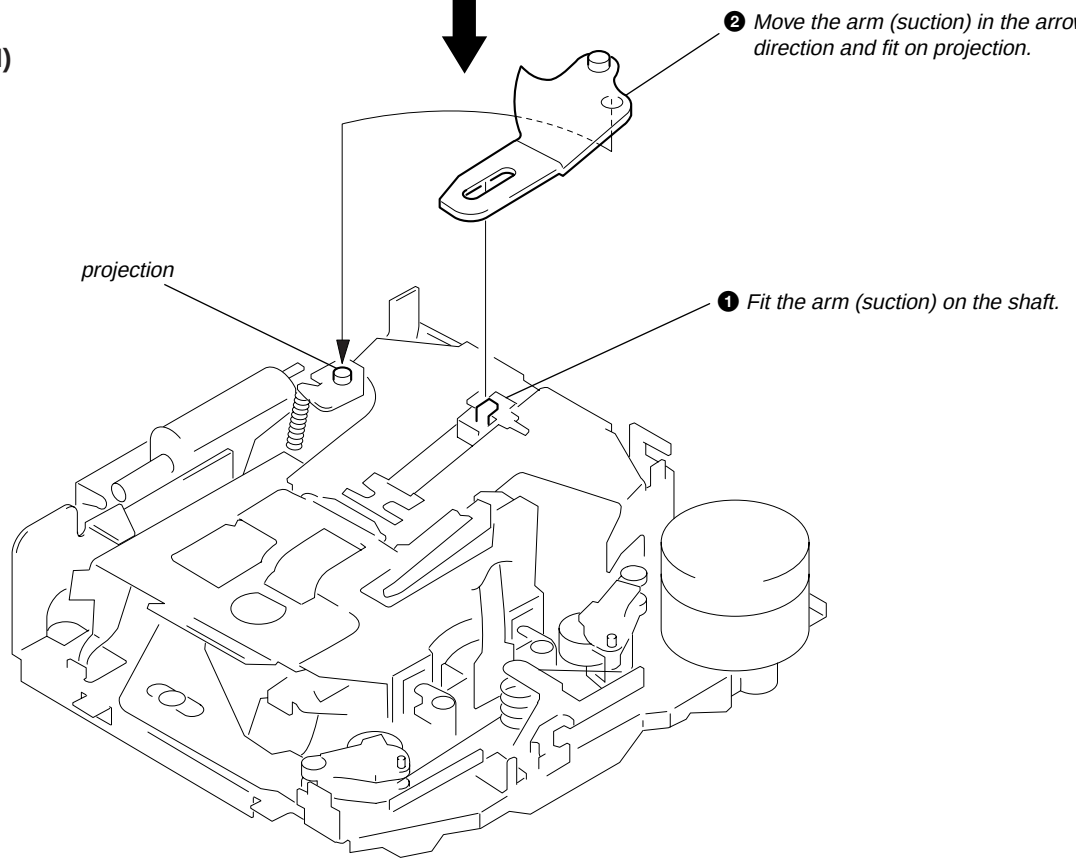
1-1. ASSEMBLY OF MECHANISM DECK

Note: Follow the assembly procedure in the numerical order given.

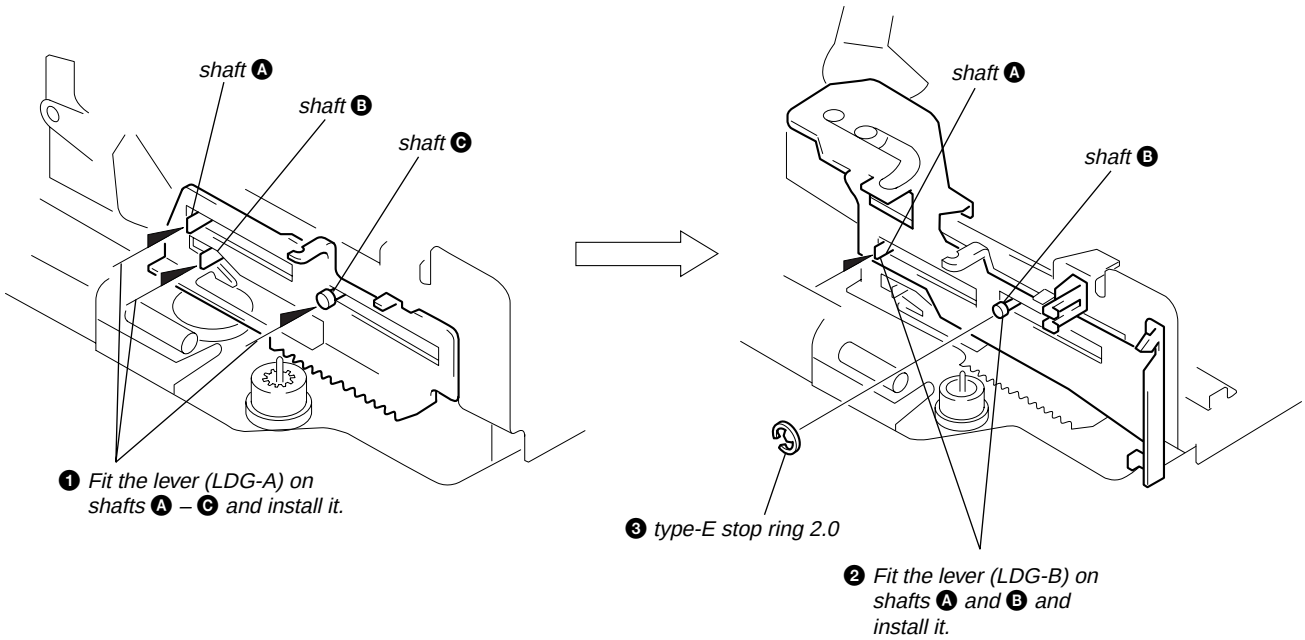
HOUSING


❼ Holder the hanger by bending the claw.
❺ Fit projection on Ⓒ part.
❶ Install the catch to the hanger.
❷ Install the hanger onto two claws of the housing.
hanger
❹ Fit claw on Ⓑ part.
❸ Put the housing under Ⓐ part.
❻ Fit projection on Ⓓ part.
housing
Ⓒ part
❽ Hold the hanger by bending the claw.
Ⓓ part
Ⓐ part
Ⓑ part

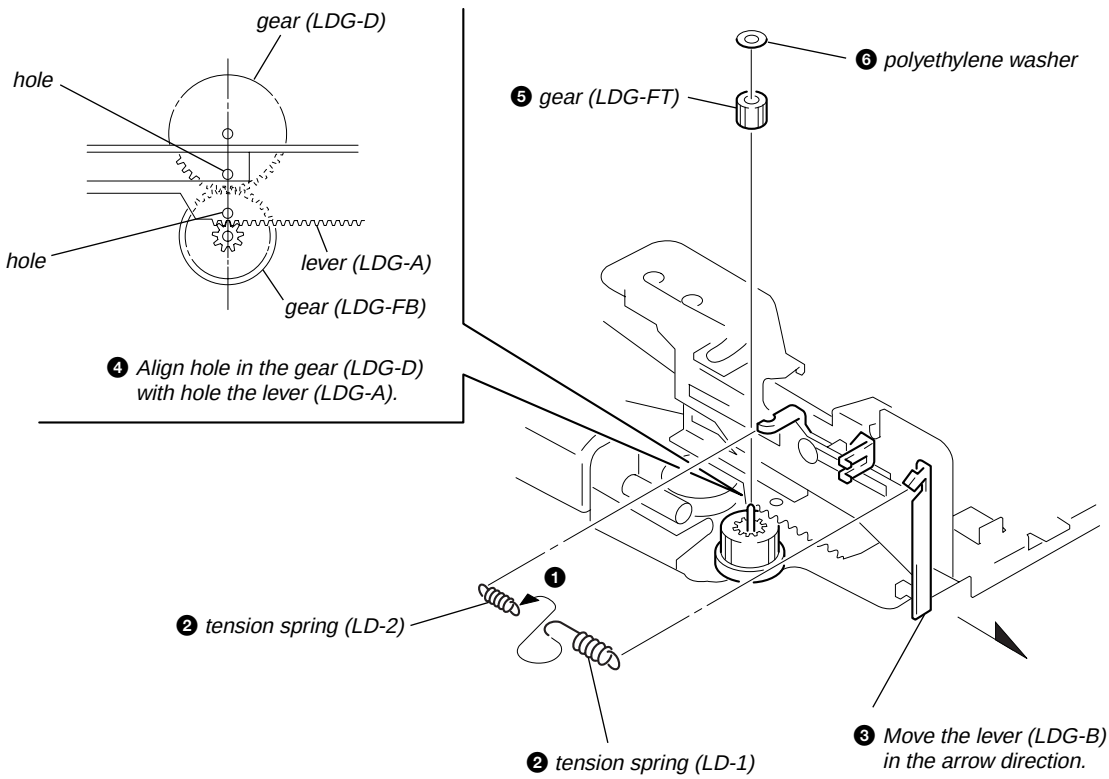
ARM (SUCTION)



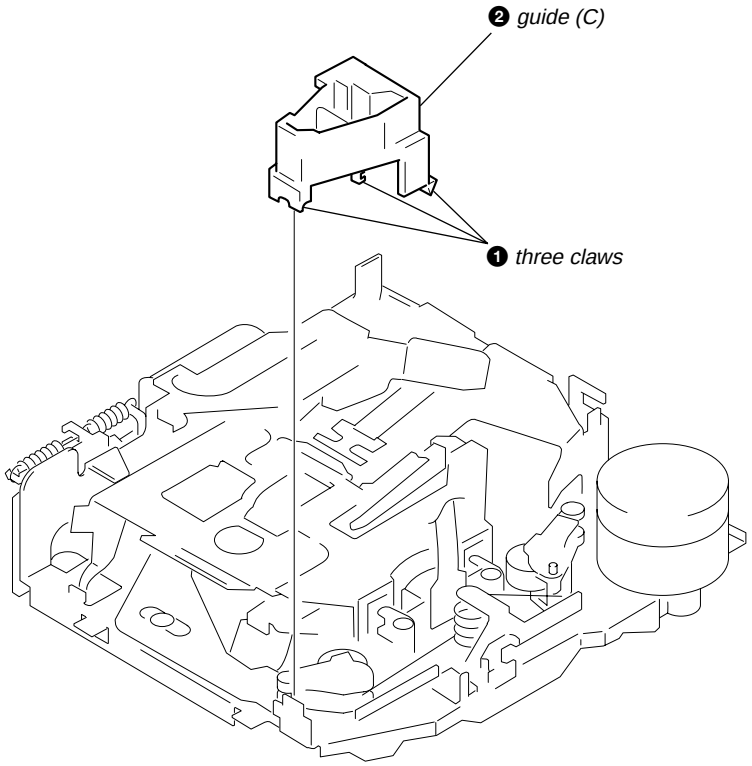
LEVER (LDG-A) / (LDG-B)


shaft Ⓐ
shaft Ⓑ
shaft Ⓒ
❶ Fit the lever (LDG-A) on shafts Ⓐ – Ⓒ and install it.
shaft Ⓐ
shaft Ⓑ
❸ type-E stop ring 2.0
❷ Fit the lever (LDG-B) on shafts Ⓐ and Ⓑ and install it.

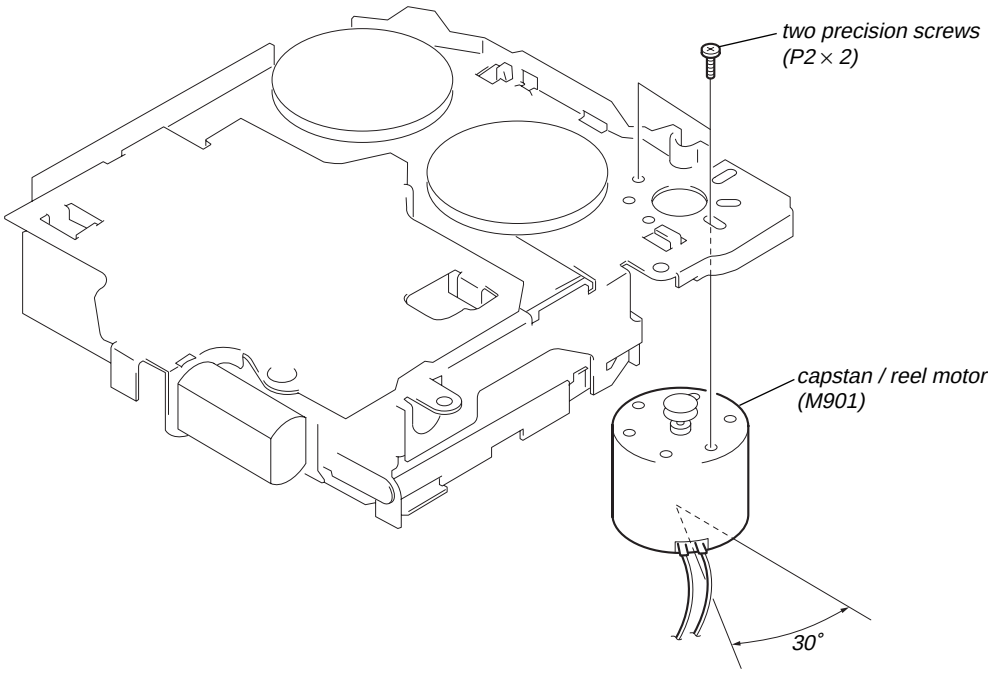
GEAR (LDG-FT)



GUIDE (C)



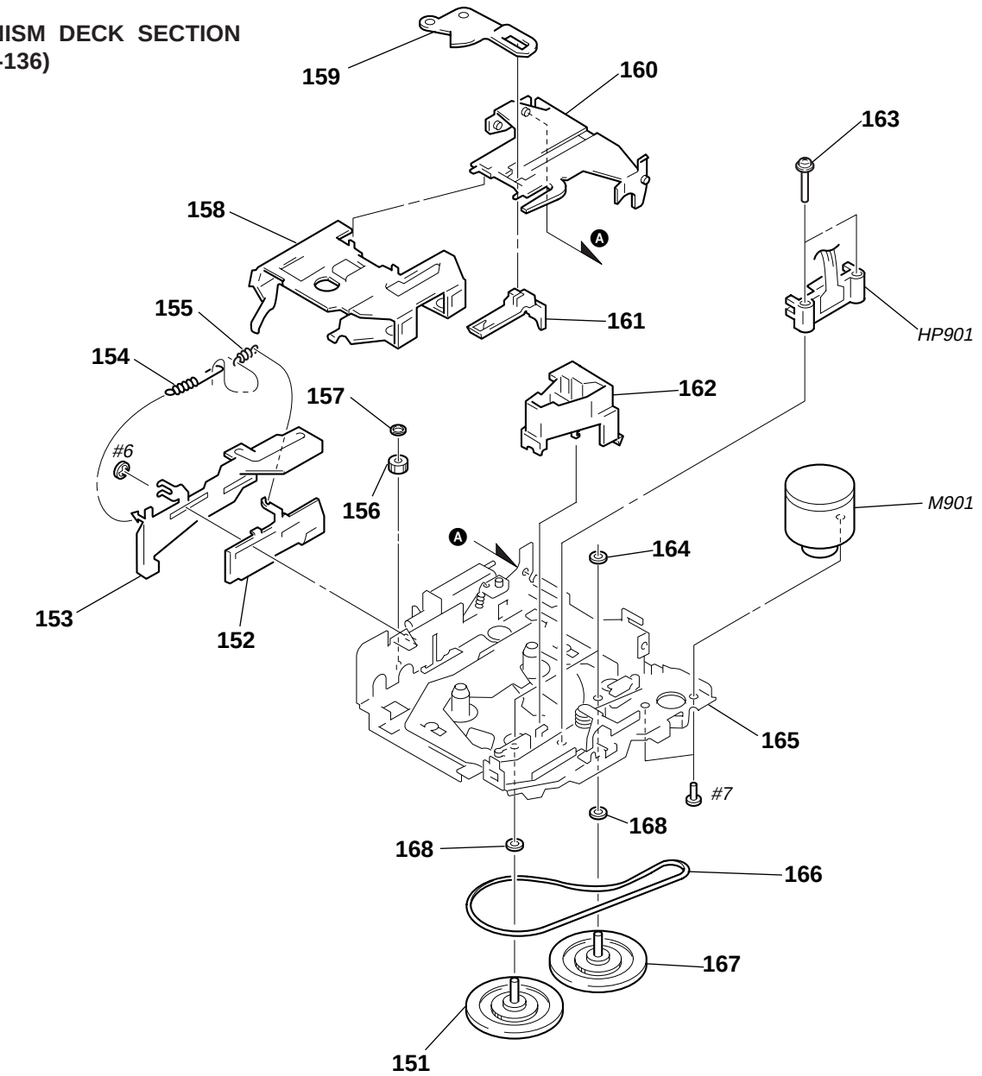
MOUNTING POSITION OF CAPSTAN / REEL MOTOR (M901)



1-2. EXPLODED VIEW

NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

MECHANISM DECK SECTION (MG-25F-136)

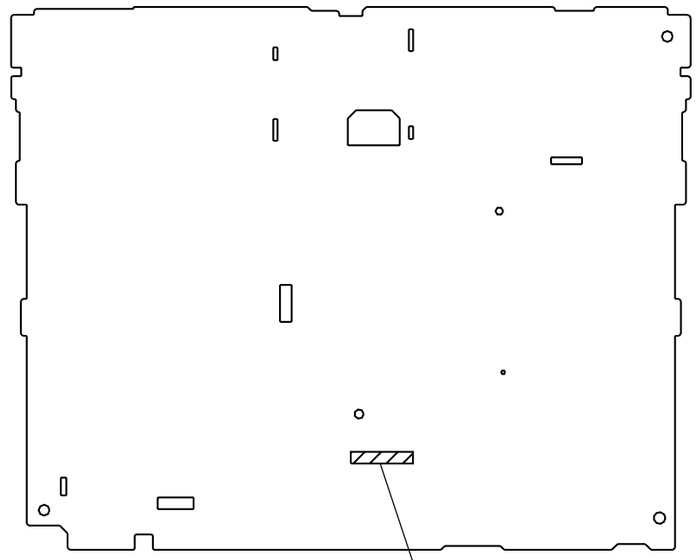


Ref. No.	Part No.	Description	Remark
151	A-3291-667-A	CLUTCH (FR) ASSY	
* 152	3-019-130-01	LEVER (LDG-A)	
* 153	3-019-131-01	LEVER (LDG-B)	
154	3-020-539-01	SPRING (LD-1), TENSION	
155	3-020-540-01	SPRING (LD-2), TENSION	
156	3-020-542-01	GEAR (LOADING FT)	
157	3-341-753-11	WASHER, POLYETHYLENE	
158	3-020-533-01	HOUSING	
* 159	3-020-532-01	ARM (SUCTION)	
160	3-020-534-01	HANGER	
161	3-933-346-01	CATCHER	
162	3-933-344-01	GUIDE (C)	
163	3-014-798-01	SCREW (HEAD), SPECIAL	
164	3-364-151-01	WASHER	
165	A-3301-267-A	CHASSIS ASSY (F)	
166	3-017-302-01	BELT (25)	
167	3-936-853-01	FLYWHEEL (F)	
168	3-701-437-21	WASHER	
HP901	1-500-157-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	
#6	7-624-104-04	STOP RING 2.0 TYPE-E	
#7	7-627-553-17	PRECISION SCREW +P 2X2 TYPE3	

2. MAIN BOARD MODIFICATION

- **New/Former Discrimination**

[MAIN BOARD] (COMPONENT SIDE)



Former type: 1-664-751-11
New type : 1-664-751-12

2-1. NOTE FOR PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

Note on Printed Wiring Board:
- ○——— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- △ : internal component.
- ▒▒▒ : Pattern from the side which enables seeing.
- Abbreviation
  3753 : XR-3753
  C353 : XR-C353

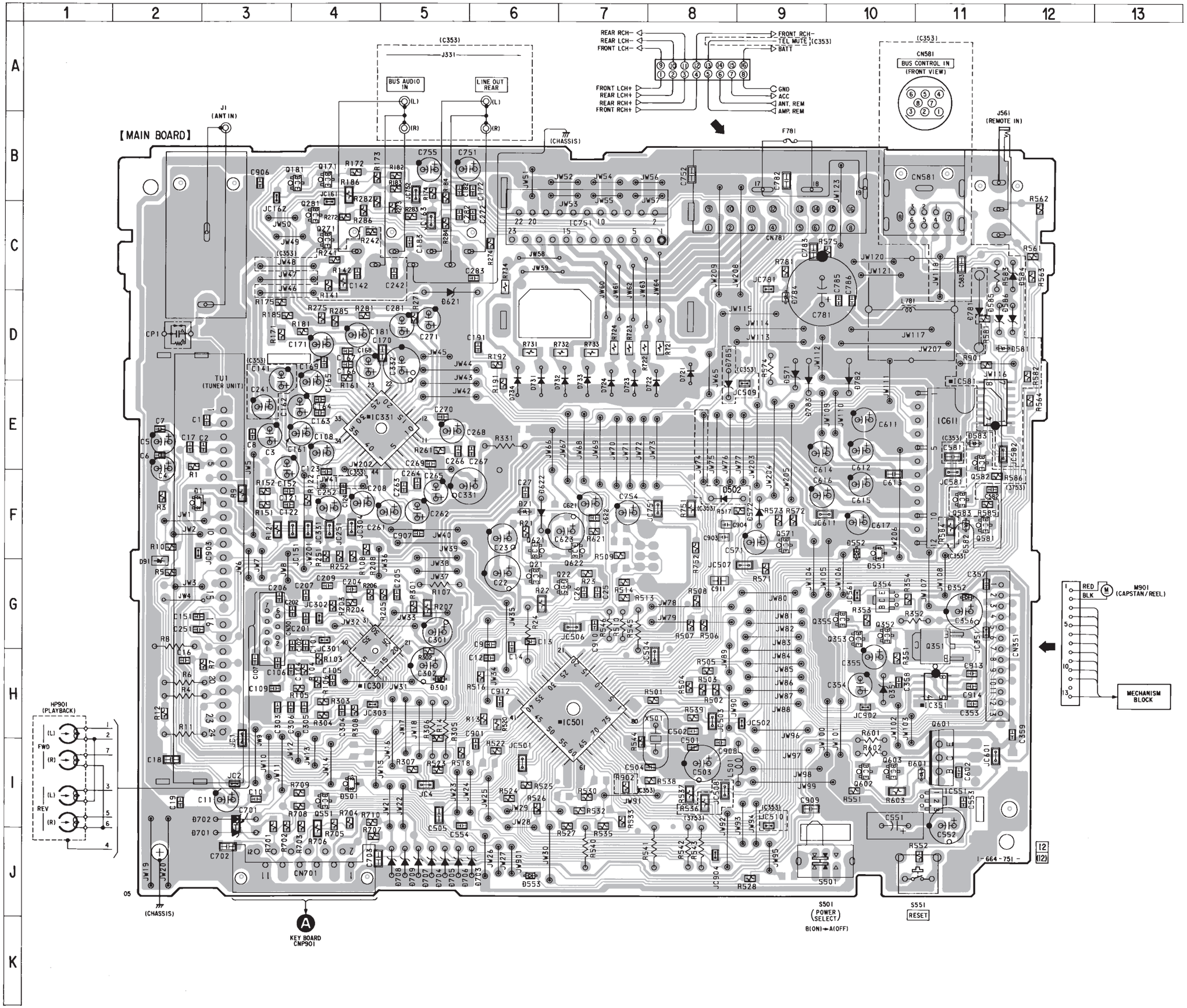
Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line.
- Power voltage is dc 14.4 V and fed with regulated dc power supply from battery and accessory terminals.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : MW (LW)
  ⟨⟨ ⟩⟩ : TAPE PLAYBACK
  ✻ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : MW (LW)
  ⇨ : TAPE PLAYBACK
  ⇨ : BUS AUDIO IN
- Abbreviation
  3753 : XR-3753
  C353 : XR-C353

2-2. PRINTED WIRING BOARD – MAIN Section –

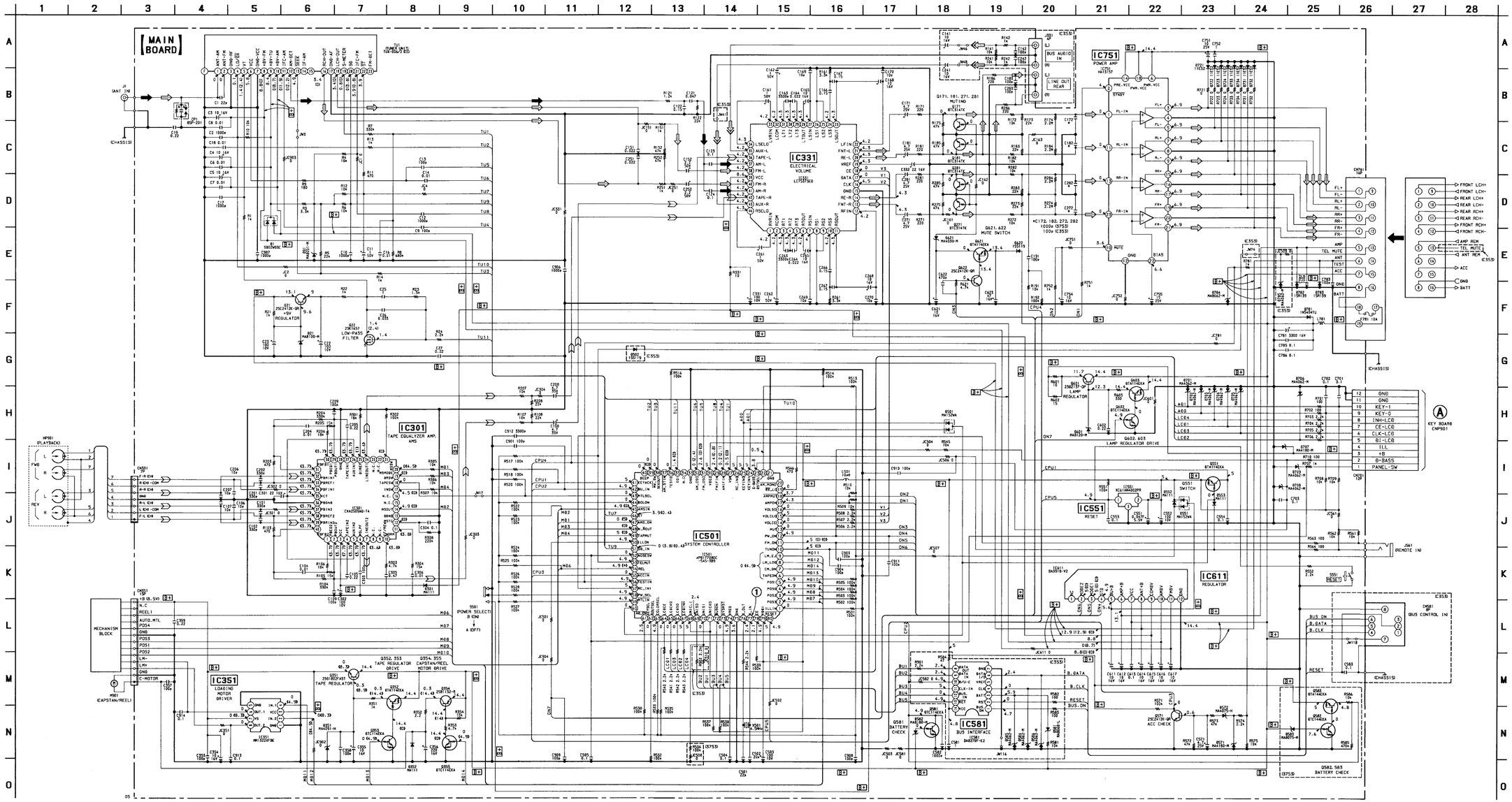
- **Semiconductor Location**

Ref. No.	Location
D1	F-2
D21	F-6
D91	F-2
D301	H-5
D351	H-10
D352	G-11
D501	I-4
△ D502	F-8
D551	F-10
D552	F-10
D553	J-6
D571	D-9
D572	F-9
△ D581	D-12
D582	F-11
○ D583	E-11
△ D584	C-12
△ D585	D-11
△ D586	D-12
D601	I-11
D621	D-5
D622	F-6
D701	J-3
D702	I-3
D703	J-6
D704	J-5
D705	J-5
D706	J-5
D707	J-5
D708	J-5
D709	J-5
D721	D-8
D722	D-8
D723	D-7
D724	D-7
D731	D-6
D732	D-7
D733	D-7
D734	D-6
D781	D-11
D782	E-10
D783	E-9
D784	D-9
△ D785	D-8
IC301	H-4
IC331	E-4
IC351	H-11
IC501	H-7
IC551	I-11
△ IC581	E-11
IC611	E-11
IC751	C-7
Q21	G-6
Q22	G-7
Q171	B-4
Q181	B-4
Q271	C-4
Q281	C-4
Q351	G-11
Q352	G-10
Q353	G-10
Q354	G-10
Q355	G-10
Q551	I-4
Q571	F-9
Q581	F-11
○ Q582	E-11
○ Q583	F-11
Q601	H-11
Q602	I-10
Q603	I-10
Q621	F-6
Q622	F-7

○ : XR-3753 only
△ : XR-C353 only



2-3. SCHEMATIC DIAGRAM – MAIN Section –



MAIN

2-4. ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-3309-930-A	MAIN BOARD, COMPLETE (XR-C353)			
*	A-3309-931-A	MAIN BOARD, COMPLETE (XR-3753)			
		**********			
*	3-009-809-01	BRACKET (IC)			
*	3-010-516-11	HEAT SINK (XR-C353)			
*	3-010-517-01	HEAT SINK (XR-3753)			
		< CAPACITOR >			
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C2	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C3	1-124-233-11	ELECT	10uF	20%	16V
C4	1-124-233-11	ELECT	10uF	20%	16V
C5	1-124-233-11	ELECT	10uF	20%	16V
C6	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C7	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C8	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C9	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C10	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C11	1-126-160-11	ELECT	1uF	20%	50V
C12	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C13	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C14	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C16	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C17	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C18	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C19	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C22	1-124-584-00	ELECT	100uF	20%	10V
C23	1-104-955-11	ELECT	100uF	20%	10V
C25	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C26	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C27	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C101	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C102	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C104	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C105	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C106	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C107	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C108	1-104-945-11	ELECT	4.7uF	20%	35V
C109	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C121	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C122	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C123	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C124	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C141	1-124-233-11	ELECT	10uF	20%	16V (XR-C353)
C142	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (XR-C353)
C151	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C152	1-124-257-00	ELECT	2.2uF	20%	50V
C161	1-126-160-11	ELECT	1uF	20%	50V
C162	1-126-160-11	ELECT	1uF	20%	50V
C163	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C164	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C165	1-124-233-11	ELECT	10uF	20%	16V
C166	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C167	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C168	1-124-233-11	ELECT	10uF	20%	16V
C169	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C170	1-163-287-11	CERAMIC CHIP	10PF	5%	50V
C171	1-126-163-11	ELECT	4.7uF	20%	50V
C172	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V (XR-3753)
C172	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (XR-C353)
C181	1-126-163-11	ELECT	4.7uF	20%	50V
C182	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V (XR-3753)
C182	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (XR-C353)
C183	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C191	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C201	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C202	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C204	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C205	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C206	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C207	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C208	1-104-945-11	ELECT	4.7uF	20%	35V
C209	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C241	1-124-233-11	ELECT	10uF	20%	16V (XR-C353)
C242	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (XR-C353)
C251	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C252	1-124-257-00	ELECT	2.2uF	20%	50V
C261	1-126-160-11	ELECT	1uF	20%	50V
C262	1-126-160-11	ELECT	1uF	20%	50V
C263	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C264	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C265	1-124-233-11	ELECT	10uF	20%	16V
C266	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V

Ref. No.	Part No.	Description			Remark
C267	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C268	1-124-233-11	ELECT	10uF	20%	16V
C269	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C270	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C271	1-126-163-11	ELECT	4.7uF	20%	50V
C272	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V (XR-3753)
C272	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (XR-C353)
C281	1-126-163-11	ELECT	4.7uF	20%	50V
C282	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V (XR-3753)
C282	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (XR-C353)
C283	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C301	1-124-234-00	ELECT	22uF	20%	16V
C302	1-124-584-00	ELECT	100uF	20%	10V
C303	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C304	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C305	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C306	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C331	1-124-584-00	ELECT	100uF	20%	10V
C332	1-124-234-00	ELECT	22uF	20%	16V
C353	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C354	1-124-233-11	ELECT	10uF	20%	16V
C355	1-124-233-11	ELECT	10uF	20%	16V
C356	1-126-934-11	ELECT	220uF	20%	16V
C357	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C358	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C359	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C501	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C502	1-163-234-11	CERAMIC CHIP	20PF	5%	50V
C503	1-124-584-00	ELECT	100uF	20%	10V
C504	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C505	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C551	1-125-701-11	DOUBLE LAYER	0.047F	0	5.5V
C552	1-124-584-00	ELECT	100uF	20%	10V
C553	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C554	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C571	1-126-163-11	ELECT	4.7uF	20%	50V
C581	1-162-638-11	CERAMIC CHIP	1uF		16V (XR-C353)
C582	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C583	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V (XR-C353)
C602	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C611	1-124-233-11	ELECT	10uF	20%	16V
C612	1-124-233-11	ELECT	10uF	20%	16V
C613	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C614	1-124-233-11	ELECT	10uF	20%	16V
C615	1-124-233-11	ELECT	10uF	20%	16V
C616	1-124-233-11	ELECT	10uF	20%	16V
C617	1-124-233-11	ELECT	10uF	20%	16V
C621	1-124-233-11	ELECT	10uF	20%	16V
C622	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C623	1-124-589-11	ELECT	47uF	20%	16V
C701	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C702	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C703	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C751	1-126-096-11	ELECT	10uF	20%	35V
C752	1-107-682-11	CERAMIC CHIP	1uF	10%	16V
C754	1-124-233-11	ELECT	10uF	20%	16V
C755	1-126-096-11	ELECT	10uF	20%	35V
C781	1-126-936-11	ELECT	3300uF	20%	16V
C782	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C783	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C785	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C786	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C901	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C903	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C904	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C906	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C907	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C908	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C909	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C910	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C911	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C912	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C913	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C914	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
		< CONNECTOR >			
* CN351	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P			
CN581	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)(XR-C353)			
CN701	1-764-422-11	PLUG, CONNECTOR 12P			
CN781	1-774-701-11	PIN, CONNECTOR 16P			
CNP301	1-766-260-11	CONNECTOR, FFC/FPC (ZIF) 7P			
		< CONPOSITION CIRCUIT BLOCK >			
CP1	1-519-504-11	GAP, DISCHARGE			
		< DIODE >			
D1	8-719-991-65	DIODE SB02W03C			
D21	8-719-423-10	DIODE MA8100-M-TX			
D91	8-719-420-90	DIODE MA8051-M			
D301	8-719-404-49	DIODE MA111			
D351	8-719-035-91	DIODE MA4091-H (TA)			
D352	8-719-404-49	DIODE MA111			
D501	8-719-400-20	DIODE MA152WA			
D502	8-719-911-19	DIODE 1SS119 (XR-C353)			
D551	8-719-400-20	DIODE MA152WA			
D552	8-719-404-49	DIODE MA111			
D553	8-719-404-49	DIODE MA111			
D571	8-719-034-94	DIODE MA4180-M (QZ)			
D572	8-719-110-03	DIODE RD7.5ESB2			
D581	8-719-017-62	DIODE MA8068-L-TX (XR-C353)			
D582	8-719-057-80	DIODE MA8160-M-TX			
D583	8-719-422-76	DIODE MA8075-M (XR-3753)			
D584	8-719-035-74	DIODE MA4062-M (TA)(XR-C353)			
D585	8-719-035-74	DIODE MA4062-M (TA)(XR-C353)			
D586	8-719-035-74	DIODE MA4062-M (TA) (XR-C353)			
D601	8-719-423-32	DIODE MA8120-M			
D621	8-719-035-54	DIODE MA4039-M (TA)			
D622	8-719-911-19	DIODE 1SS119			
D701	8-719-035-74	DIODE MA4062-M (TA)			
D702	8-719-035-74	DIODE MA4062-M (TA)			
D703	8-719-035-74	DIODE MA4062-M (TA)			
D704	8-719-035-74	DIODE MA4062-M (TA)			
D705	8-719-035-74	DIODE MA4062-M (TA)			
D706	8-719-035-74	DIODE MA4062-M (TA)			

MAIN

Ref. No.	Part No.	Description	Remark
D707	8-719-034-94	DIODE MA4180-M (QZ)	
D708	8-719-035-74	DIODE MA4062-M (TA)	
D709	8-719-035-74	DIODE MA4062-M (TA)	
D721	8-719-200-82	DIODE 11ES2	
D722	8-719-200-82	DIODE 11ES2	
D723	8-719-200-82	DIODE 11ES2	
D724	8-719-200-82	DIODE 11ES2	
D731	8-719-200-82	DIODE 11ES2	
D732	8-719-200-82	DIODE 11ES2	
D733	8-719-200-82	DIODE 11ES2	
D734	8-719-200-82	DIODE 11ES2	
D781	8-719-049-38	DIODE 1N5404TU	
D782	8-719-970-02	DIODE 1SR139-400	
D783	8-719-970-02	DIODE 1SR139-400	
D784	8-719-422-64	DIODE MA8062-M	
D785	8-719-035-74	DIODE MA4062-M (TA) (XR-C353)	
		< IC >	
IC301	8-752-079-78	IC CXA2509AQ-T4	
IC331	8-759-443-67	IC LC75373ED	
IC351	8-759-395-97	IC MM1322XFBE	
IC501	8-759-462-38	IC uPD17708GC-545-3B9	
IC551	8-759-363-81	IC XC61AN4002PR	
IC581	8-759-449-89	IC BA8270F-E2 (XR-C353)	
IC611	8-759-347-49	IC BA3918-V2	
IC751	8-759-490-48	IC HA13157	
		< JACK >	
J1	1-764-808-21	JACK (ANT) (ANT IN)	
J331	1-774-699-12	JACK, PIN 4P (BUS AUDIO IN/LINE OUT REAR) (XR-C353)	
J561	1-566-822-41	JACK (REMOTE IN)	
		< SHORT >	
JC1	1-216-296-00	SHORT 0	
JC2	1-216-295-00	SHORT 0	
JC4	1-216-296-00	SHORT 0	
JC151	1-216-296-00	SHORT 0	
JC161	1-216-295-00	SHORT 0	
JC162	1-216-295-00	SHORT 0	
JC163	1-216-296-00	SHORT 0	
JC251	1-216-296-00	SHORT 0	
JC301	1-216-295-00	SHORT 0	
JC302	1-216-295-00	SHORT 0	
JC303	1-216-295-00	SHORT 0	
JC304	1-216-296-00	SHORT 0	
JC331	1-216-296-00	SHORT 0	
JC351	1-216-295-00	SHORT 0	
JC501	1-216-296-00	SHORT 0	
JC502	1-216-295-00	SHORT 0	
JC503	1-216-296-00	SHORT 0	
JC504	1-216-296-00	SHORT 0	
JC506	1-216-296-00	SHORT 0	
JC507	1-216-296-00	SHORT 0	
JC508	1-216-296-00	SHORT 0 (XR-3753)	
JC509	1-216-295-00	SHORT 0 (XR-C353)	
JC510	1-216-295-00	SHORT 0 (XR-C353)	
JC561	1-216-295-00	SHORT 0	
JC581	1-216-296-00	SHORT 0	
JC582	1-216-296-00	SHORT 0 (XR-C353)	
JC601	1-216-296-00	SHORT 0	
JC611	1-216-296-00	SHORT 0	
JC751	1-216-296-00	SHORT 0	
JC752	1-216-296-00	SHORT 0	
JC781	1-216-295-00	SHORT 0	
JC902	1-216-295-00	SHORT 0	
JC903	1-216-295-00	SHORT 0	
JC904	1-216-295-00	SHORT 0	
		< COIL >	
L501	1-410-509-11	INDUCTOR 10uH	
L781	1-411-669-21	INDUCTOR	
		< TRANSISTOR >	
Q21	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q22	8-729-021-94	TRANSISTOR 2SK1657-T1B	
Q171	8-729-920-21	TRANSISTOR DTC314TKH04	
Q181	8-729-920-21	TRANSISTOR DTC314TKH04	
Q271	8-729-920-21	TRANSISTOR DTC314TKH04	
Q281	8-729-920-21	TRANSISTOR DTC314TKH04	
Q351	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q352	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q353	8-729-900-53	TRANSISTOR DTC114EK	
Q354	8-729-106-60	TRANSISTOR 2SB1115A	
Q355	8-729-900-53	TRANSISTOR DTC114EK	
Q551	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q571	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q581	8-729-900-53	TRANSISTOR DTC114EK	
Q582	1-801-806-11	TRANSISTOR DTC144EKA-T146 (XR-3753)	
Q583	8-729-027-38	TRANSISTOR DTA144EKA-T146 (XR-3753)	
Q601	8-729-423-99	TRANSISTOR 2SD2137-OP	
Q602	8-729-900-53	TRANSISTOR DTC114EK	
Q603	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q621	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q622	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		< RESISTOR >	
R1	1-216-049-11	RES, CHIP 1K 5% 1/10W	
R3	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R4	1-249-429-11	CARBON 10K 5% 1/4W	
R5	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R6	1-249-429-11	CARBON 10K 5% 1/4W	
R7	1-216-109-00	METAL CHIP 330K 5% 1/10W	
R8	1-247-899-11	CARBON 680K 5% 1/4W	
R9	1-216-180-00	RES, CHIP 180 5% 1/8W	
R10	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R11	1-249-413-11	CARBON 470 5% 1/4W	
R12	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R13	1-216-049-11	RES, CHIP 1K 5% 1/10W	
R14	1-216-049-11	RES, CHIP 1K 5% 1/10W	
R21	1-216-049-11	RES, CHIP 1K 5% 1/10W	
R22	1-216-198-00	RES, CHIP 1K 5% 1/8W	
R23	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R24	1-249-421-11	CARBON 2.2K 5% 1/4W	
R103	1-216-041-00	METAL CHIP 470 5% 1/10W	
R104	1-216-109-00	METAL CHIP 330K 5% 1/10W	
R105	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R106	1-216-079-00	METAL CHIP 18K 5% 1/10W	

Ref. No.	Part No.	Description			Remark
R107	1-249-429-11	CARBON	10K	5%	1/4W
R108	1-216-081-00	METAL CHIP	22K	5%	1/10W
R121	1-216-200-11	RES, CHIP	1.2K	5%	1/8W
R122	1-216-081-00	METAL CHIP	22K	5%	1/10W
R141	1-216-073-00	METAL CHIP	10K	5%	1/10W (XR-C353)
R142	1-216-198-00	RES, CHIP	1K	5%	1/8W (XR-C353)
R151	1-216-049-11	RES, CHIP	1K	5%	1/10W
R152	1-216-089-11	RES, CHIP	47K	5%	1/10W
R161	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R171	1-216-033-00	METAL CHIP	220	5%	1/10W
R172	1-216-073-00	METAL CHIP	10K	5%	1/10W
R173	1-216-081-00	METAL CHIP	22K	5%	1/10W
R174	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R175	1-216-089-00	RES, CHIP	47K	5%	1/10W
R181	1-216-033-00	METAL CHIP	220	5%	1/10W
R182	1-216-073-00	METAL CHIP	10K	5%	1/10W
R183	1-216-081-00	METAL CHIP	22K	5%	1/10W
R184	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R185	1-216-089-00	RES, CHIP	47K	5%	1/10W
R186	1-216-182-00	RES, CHIP	220	5%	1/8W
R191	1-216-073-00	METAL CHIP	10K	5%	1/10W
R192	1-216-097-00	RES, CHIP	100K	5%	1/10W
R203	1-216-041-00	METAL CHIP	470	5%	1/10W
R204	1-216-109-00	METAL CHIP	330K	5%	1/10W
R205	1-216-077-00	METAL CHIP	15K	5%	1/10W
R206	1-216-079-00	METAL CHIP	18K	5%	1/10W
R207	1-216-222-00	RES, CHIP	10K	5%	1/8W
R208	1-216-081-00	METAL CHIP	22K	5%	1/10W
R241	1-216-073-00	METAL CHIP	10K	5%	1/10W (XR-C353)
R242	1-216-049-11	RES, CHIP	1K	5%	1/10W (XR-C353)
R251	1-216-049-11	RES, CHIP	1K	5%	1/10W
R252	1-216-089-00	RES, CHIP	47K	5%	1/10W
R261	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R271	1-216-033-00	METAL CHIP	220	5%	1/10W
R272	1-216-073-00	METAL CHIP	10K	5%	1/10W
R273	1-216-081-00	METAL CHIP	22K	5%	1/10W
R274	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R275	1-216-089-00	RES, CHIP	47K	5%	1/10W
R281	1-216-033-00	METAL CHIP	220	5%	1/10W
R282	1-216-073-00	METAL CHIP	10K	5%	1/10W
R283	1-216-081-00	METAL CHIP	22K	5%	1/10W
R284	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R285	1-216-089-00	RES, CHIP	47K	5%	1/10W
R286	1-216-033-00	METAL CHIP	220	5%	1/10W
R301	1-216-079-00	METAL CHIP	18K	5%	1/10W
R302	1-216-097-00	RES, CHIP	100K	5%	1/10W
R303	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R304	1-216-077-00	METAL CHIP	15K	5%	1/10W
R305	1-249-429-11	CARBON	10K	5%	1/4W
R306	1-249-429-11	CARBON	10K	5%	1/4W
R307	1-216-073-00	METAL CHIP	10K	5%	1/10W
R308	1-216-105-00	RES, CHIP	220K	5%	1/10W
R331	1-249-393-11	CARBON	10	5%	1/4W
R351	1-216-049-11	RES, CHIP	1K	5%	1/10W
R352	1-249-385-11	CARBON	2.2	5%	1/6W
R353	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R354	1-216-073-00	METAL CHIP	10K	5%	1/10W
R501	1-216-097-00	RES, CHIP	100K	5%	1/10W
R502	1-216-097-00	RES, CHIP	100K	5%	1/10W
R503	1-216-097-00	RES, CHIP	100K	5%	1/10W
R504	1-216-097-00	RES, CHIP	100K	5%	1/10W
R505	1-216-097-00	RES, CHIP	100K	5%	1/10W
R506	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R507	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R508	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R509	1-216-073-00	METAL CHIP	10K	5%	1/10W
R510	1-249-429-11	CARBON	10K	5%	1/4W
R513	1-216-699-11	METAL CHIP	100K	0.5%	1/10W
R514	1-216-699-11	METAL CHIP	100K	0.5%	1/10W
R516	1-216-097-00	RES, CHIP	100K	5%	1/10W
R517	1-216-097-00	RES, CHIP	100K	5%	1/10W
R518	1-216-097-00	RES, CHIP	100K	5%	1/10W
R520	1-216-097-00	RES, CHIP	100K	5%	1/10W
R522	1-216-097-00	RES, CHIP	100K	5%	1/10W
R523	1-216-097-00	RES, CHIP	100K	5%	1/10W
R524	1-216-097-00	RES, CHIP	100K	5%	1/10W
R525	1-216-097-00	RES, CHIP	100K	5%	1/10W
R526	1-216-097-00	RES, CHIP	100K	5%	1/10W
R527	1-216-097-00	RES, CHIP	100K	5%	1/10W
R528	1-216-097-00	RES, CHIP	100K	5%	1/10W
R530	1-216-097-00	RES, CHIP	100K	5%	1/10W
R532	1-216-097-00	RES, CHIP	100K	5%	1/10W
R533	1-216-097-00	RES, CHIP	100K	5%	1/10W
R535	1-216-097-00	RES, CHIP	100K	5%	1/10W
R536	1-216-246-00	RES, CHIP	100K	5%	1/8W (XR-3753)
R537	1-216-246-00	RES, CHIP	100K	5%	1/8W
R538	1-216-097-00	RES, CHIP	100K	5%	1/10W
R539	1-216-097-00	RES, CHIP	100K	5%	1/10W
R540	1-249-421-11	CARBON	2.2K	5%	1/4W
R541	1-249-421-11	CARBON	2.2K	5%	1/4W
R542	1-249-421-11	CARBON	2.2K	5%	1/4W
R543	1-249-421-11	CARBON	2.2K	5%	1/4W
R544	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R545	1-249-429-11	CARBON	10K	5%	1/4W
R546	1-249-413-11	CARBON	470	5%	1/4W
R551	1-216-097-00	RES, CHIP	100K	5%	1/10W
R552	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R561	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R562	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R563	1-216-025-00	RES, CHIP	100	5%	1/10W
R564	1-216-025-00	RES, CHIP	100	5%	1/10W
R571	1-216-097-00	RES, CHIP	100K	5%	1/10W
R572	1-216-089-00	RES, CHIP	47K	5%	1/10W
R573	1-216-089-00	RES, CHIP	47K	5%	1/10W
R574	1-249-421-11	CARBON	2.2K	5%	1/4W
R575	1-216-073-00	METAL CHIP	10K	5%	1/10W
R581	1-216-073-00	METAL CHIP	10K	5%	1/10W (XR-C353)
R582	1-216-025-00	RES, CHIP	100	5%	1/10W (XR-C353)
R583	1-247-807-31	CARBON	100	5%	1/4W (XR-C353)

MAIN

Ref. No.	Part No.	Description			Remark
R584	1-216-166-00	RES, CHIP	47	5%	1/8W (XR-C353)
R585	1-216-113-00	METAL CHIP	470K	5%	1/10W (XR-3753)
R586	1-216-073-00	METAL CHIP	10K	5%	1/10W (XR-3753)
R601	1-249-393-11	CARBON	10	5%	1/4W
R602	1-249-395-11	CARBON	15	5%	1/4W
R603	1-216-186-00	RES, CHIP	330	5%	1/8W
R621	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R701	1-216-025-00	RES, CHIP	100	5%	1/10W
R702	1-216-025-00	RES, CHIP	100	5%	1/10W
R703	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R704	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R705	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R706	1-216-206-00	RES, CHIP	2.2K	5%	1/8W
R707	1-216-049-11	RES, CHIP	1K	5%	1/10W
R708	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R709	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R710	1-216-025-00	RES, CHIP	100	5%	1/10W
R721	1-216-296-00	SHORT	0		
R722	1-216-296-00	SHORT	0		
R723	1-216-296-00	SHORT	0		
R724	1-216-296-00	SHORT	0		
R731	1-216-296-00	SHORT	0		
R732	1-216-296-00	SHORT	0		
R733	1-216-296-00	SHORT	0		
R734	1-216-296-00	SHORT	0		
R751	1-216-198-00	RES, CHIP	1K	5%	1/8W
R752	1-216-049-11	RES, CHIP	1K	5%	1/10W
R781	1-216-049-11	RES, CHIP	1K	5%	1/10W
R901	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (XR-C353)
R902	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (XR-C353)
		< SWITCH >			
S501	1-571-478-11	SWITCH, SLIDE (POWER SELECT)			
S551	1-692-431-21	SWITCH, TACTILE (RESET)			
		< TUNER >			
TU1	A-3282-031-A	TUNER UNIT TUX-006/2 (EE)			
		< VIBRATOR >			
X501	1-567-713-11	VIBRATOR, CRYSTAL (4.5MHz)			

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